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MONTEREY, CALIFORNIA

THESIS

**TRANSPARENCY AS A TOOL: SECURING
COLLABORATIVE APPROACHES TO
FEDERAL HOMELAND SECURITY FUNDING
IN THE LOS ANGELES AREA**

by

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March 2023

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APPROACHES TO FEDERAL HOMELAND SECURITY FUNDING IN THE
LOS ANGELES AREA**

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ABSTRACT

The Los Angeles Area Urban Area Security Initiative (LAA UASI) is a federal grant program that takes a regional approach to grant projects that improve safety and security in Los Angeles. The research conducted for this thesis aimed to contribute to ongoing efforts to enhance the LAA UASI's safety, provide a framework for collaborative networks, and create a positive environment with real-time information for managing large-scale incidents, including natural and human-made disasters. The research found that the LAA UASI has significantly enhanced the Los Angeles community's preparedness and response capabilities and identified some areas for improvement. After analyzing best practices from many sectors, including private industry, public safety, the energy sector, not-for-profit governance, and corporate business, this thesis offers several recommendations for future implementation of the program to enhance overall collaboration and cooperation—the bridge to building strong networks of partners and keeping American cities safe. Overall, this thesis lends valuable insights and recommendations for decision-makers working to improve the safety and security of the Los Angeles community.

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LIST OF ACRONYMS AND ABBREVIATIONS

AI	artificial intelligence
AOR	area of responsibility
Cal OES	California Office of Emergency Services
CBRNE	chemical, biological, radiation, nuclear, explosive
CEO	chief executive officer
CERT	community emergency response team
CMMS	computerized maintenance management system
COP	common operating picture
DHS	Department of Homeland Security
EMD	Emergency Management Department
EOC	emergency operations center
FEMA	Federal Emergency Management Agency
GAO	Government Accountability Office
GIS	Geographic Information System
hazmat	hazardous material
HVE	homegrown violent extremist
ISO	independent service operator
LA	Los Angeles
LAA	Los Angeles Area
LAAFCA	Los Angeles Area Fire Chiefs Association
LAAPCA	Los Angeles Area Police Chiefs Association
LAFD	Los Angeles (City) Fire Department
LAWA	Los Angeles World Airport
LB	Long Beach
MSA	metropolitan statistical area
NIMS	National Incident Management System
NIPP	<i>National Infrastructure Protection Plan</i>

NPG	<i>National Preparedness Guidelines</i>
PATRIOT	Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (Act)
PD	police department
POLA	Port of Los Angeles
RFID	radio frequency identification
SHSP	State Homeland Security Program
UASI	Urban Area Security Initiative
UNDP	United Nations Development Programme
WMD	weapon of mass destruction

EXECUTIVE SUMMARY

The Urban Area Security Initiative (UASI) is designed to enhance regional preparedness and capabilities in high-threat, high-density urban areas.¹ In 2022, UASI grants funded nearly \$615 million nationwide and just under \$68 million for the Los Angeles (LA) region.² Competition among agencies for the resources allocated for the LA region often result in conflicts from the differing visions of who should receive funding. To build a more effective UASI program in LA, this thesis argues for the incorporation of collaborative processes into governance, training, and technology.

In determining the best course of action, I explored many of the processes that go into grant development. Much of these processes involve human elements and clashes between regional security initiatives and individual agencies hoping to acquire “stuff.” I examined ways to encourage their collaboration as opposed to their fighting for a share of the “entitlements.”

I began with a policy analysis of current governance, process styles, and the best ways to modify the existing governance systems. In management, such an inquiry means establishing open networks of decision-making authorities between participating agencies and developing shared collaborative processes. Notably, LA agencies have collaborated well in the framework of wildfires, but they could do better in response to homeland security issues.

The next aspect of the research involved investigating two technological innovations that build platforms to unify intelligence. Technology plays a crucial part in fostering collaboration between agencies. Indeed, agencies could collaborate more effectively if they invested in shared technology systems like asset management and

¹ Pamela S. Williams, “Fiscal Year 2022 Notices of Funding Opportunity,” Grant Programs Directorate Information Bulletin No. 474 (official memorandum, Washington, DC: Department of Homeland Security, 2022), https://www.fema.gov/sites/default/files/documents/fema_ib-fy-2022-preparedness-grants.pdf.

² Chris P. Currie, *Homeland Security Grant Program: Additional Actions Could Further Enhance FEMA’s Risk-Based Grant Assessment Model*, GAO-18-354 (Washington, DC: Government Accountability Office, 2018), 37.

common operating picture systems. The UASI must ensure that all partners have access to the same information and can communicate effectively before, during, and after emergencies. For success, the LA region must bridge the gap between types of agencies and different mission sets.

Finally, training is crucial for promoting transparency and collaboration among UASI partners. Producing mission-focused training for executive-authority members could help unify the membership of the UASI. Ongoing training that covers emergency management, incident response, and interagency communication could promote a common understanding of procedures and protocols and foster a sense of teamwork.

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This year and a half has not been without its losses. Within this timeframe, I lost two amazing personal friends, whom I would be remiss not to mention. “Wild” Bill James was a fire station leader and my “water buddy” at Los Angeles City Fire Department’s Fire Station 21. Wild Bill was known for laughter, quick wit, and excellence in his craft. Kenny Brink was a young, hard-charging member who I was blessed to have worked with at the “fish sticks” Fire Station 11. Kenny was dedicated and compassionate and a true friend. Kenny would have given the shirt off his back to help anyone in need. The loss of these two friends gave me pause and prompted my appreciation for the opportunities that I have had and, in their examples, have given me the strength to keep going—because they wouldn’t have expected anything less.

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I. INTRODUCTION

Today's federal grant process for local first-response agencies often creates a divisive culture and regularly discourages regional coordination and cooperation. In 2003, the Department of Homeland Security (DHS) initiated the Homeland Security Grant Program to incorporate all projects that provide funding to local and state agencies.¹ One of these grant programs is called the Urban Area Security Initiative (UASI), an ongoing program that provides federal money to large metropolitan regions. The grants aim "to build and sustain the capabilities necessary to prevent, protect against, mitigate the effects of, respond to, and recover from those threats that pose the greatest risk to the security of the Nation."²

As of this writing, DHS has designated 36 UASI program locations throughout the continental United States.³ Of these, 10 of the highest priority locations form Tier 1: Los Angeles/Long Beach, San Francisco Bay, the National Capital Region, Chicago, Boston, Jersey City/Newark, New York City, Philadelphia, Houston, and Dallas/Fort Worth/Arlington.⁴ The Homeland Security Grants website claims, "The program addresses the unique needs of multi-discipline planning, organization, equipment, and training."⁵ From a fire service perspective, UASI grants are intended to enhance capabilities in many areas, including

¹ Chris P. Currie, *Homeland Security Grant Program: Additional Actions Could Further Enhance FEMA's Risk-Based Grant Assessment Model*, GAO-18-354 (Washington, DC: Government Accountability Office, 2018).

² Department of Homeland Security, *National Preparedness Goal* (Washington, DC: Department of Homeland Security, 2011), A-2, <https://www.fema.gov/pdf/prepared/npg.pdf>.

³ Pamela S. Williams, "Fiscal Year 2022 Notices of Funding Opportunity," Grant Programs Directorate Information Bulletin No. 474 (official memorandum, Washington, DC: Department of Homeland Security, 2022), https://www.fema.gov/sites/default/files/documents/fema_ib-fy-2022-preparedness-grants.pdf.

⁴ "DHS Announces Funding Opportunity for Fiscal Year 2020 Preparedness Grants," Department of Homeland Security, February 14, 2020, <https://www.dhs.gov/news/2020/02/14/dhs-announces-funding-opportunity-fiscal-year-2020-preparedness-grants>.

⁵ "Urban Areas Security Initiative (UASI) Program," Homeland Security Grants, accessed June 24, 2022, <https://www.homelandsecuritygrants.info/GrantDetails.aspx?gid=17162>.

- interoperable communications programs;
- critical infrastructure protection;
- intelligence and information sharing (fusion center involvement);
- chemical, biological, radiation, nuclear, and explosive (CBRNE) detection and response needs, including weapons of mass destruction (WMD)/hazardous material (hazmat) response and decontamination;
- urban search-and-rescue;
- active-shooter response needs; and
- human-trafficking reduction.⁶

The incident capabilities enumerated require a vast contingency of assets. Indeed, National Incident Management System (NIMS) principles describe large quantities or units, specialized assets, emergency operations center (EOC) personnel, and overhead command staff.⁷ Regional collaboration and partnerships become necessary as large-scale incidents create a significant draw-down of resources.⁸ Such has been the case with Southern California’s current collaborative approach to wildfires. Wind-driven fires threaten a wide geographic area, where multiple regional agencies must work together to mitigate the problem. Because of the frequency of wildfires, the Los Angeles region expects multijurisdictional responses.⁹ Within the context of wildfires, the region is united and works collaboratively. In fact, the model of regional wildfire response represents a successful model of interagency collaboration—born of necessity and frequent incidents.

⁶ Dallas Urban Area Security Initiative Working Group, *Dallas/Fort Worth/Arlington Urban Area Strategy* (Arlington: North Central Texas Council of Governments, 2011), 4–6.

⁷ Federal Emergency Management Agency, *National Incident Management System*, 3rd ed. (Washington, DC: Federal Emergency Management Agency, 2017), 4–8, https://www.fema.gov/sites/default/files/2020-07/fema_nims_doctrine-2017.pdf.

⁸ Federal Emergency Management Agency, 40.

⁹ Pamela J. Jakes et al., *Best Management Practices for Creating a Community Wildfire Protection Plan*, General Technical Report NRS-89 (Newtown Square, PA: U.S. Forest Service, Northern Research Station, 2012), 7, <https://doi.org/10.2737/NRS-GTR-89>.

Nonetheless, collaboration in the Los Angeles UASI region is much more challenging when it comes to broader homeland security missions. The system of allocating federal grant money within the 29 separate Los Angeles area fire departments often fuels conflict. The lack of collaboration often leads to redundant homeland security purchases, training, and resource allocation. In discussing the events leading to 9/11, MacManus and Caruson suggest the most important lesson learned involved the need for governmental agencies and organizations to coordinate their efforts.¹⁰ Additionally, conflicts arise between department managers over the share of money each agency believes it should receive or is entitled to. As larger agencies within these networks receive most of the funds, smaller agencies often perceive an inability to achieve homeland security mission preparation.

This research explores strengthening the Los Angeles area's regional approach to allocating UASI funding from DHS. This study presents a framework that builds a sustainable culture of unity within the Los Angeles Area (LAA)'s UASI region, with the aim of responding appropriately and effectively during significant-scale incidents. Furthermore, this thesis examines approaches to building collaborative networks that foster trust and interagency partnerships and unite specialized operators and executive leaders with a sense of purpose.

A. RESEARCH QUESTIONS

1. How can the Los Angeles region best achieve a successful and collaborative and cooperative homeland security program within the UASI funding paradigm?
2. How can the UASI grant best innovate the grant funding framework into a more effective regional approach that increases homeland security preparedness and response in Los Angeles?

¹⁰ Susan A. MacManus and Kiki Caruson, "Emergency Management: Gauging the Extensiveness and Quality of Public-and Private-Sector Collaboration at the Local Level," *Urban Affairs Review* 47, no. 2 (March 2011): 286, <https://doi.org/10.1177/1078087410362050>.

B. REVIEW OF RELEVANT LITERATURE

This literature review is built around three broad areas of implementation that strive to increase collaboration and cooperation among agencies of the LAA UASI. The first area is governance, with an aim to enhance the structure of leadership in the system. Second, the literature review explores technological innovations that support the creation and maintenance of collaborative networks between agencies. The third area concerns training programs and how their development gives executive leadership better mission-oriented decision tools.

1. Governance

Numerous experts have defined governance. The United Nations Global Compact describes *governance* as “the process of decision making and the process by which decisions are implemented or not implemented.”¹¹ Michalski, Miller, and Stevens provide another broad definition: “Governance—whether public or private—has been defined simply as the general exercise of authority.”¹² In some situations, governance is the result of one person in charge, while in other structures, many more voting members make executive-level decisions. A final definition suggested by Fukuyama holds that governance is the “government’s ability to make and enforce rules and to deliver services, regardless of whether that government is democratic.”¹³ Governance, according to Fukuyama, is a system that provides oversight of the operations of any group, business, or the like.

According to Scott Baret et al., successful governance comprises parts with separate ideologies that together build a structure. They explain that governance involves four basic tenets: improved clarity (accountability), greater visibility (transparency), enhanced

¹¹ “Governance,” United Nations Global Compact, accessed August 21, 2022, <https://unglobalcompact.org/what-is-gc/our-work/governance>.

¹² Wolfgang Michalski, Riel Miller, and Barrie Stevens, “Governance in the 21st Century: Power in the Global Knowledge Economy and Society,” in *Governance in the 21st Century* (Paris: Organisation for Economic Co-operation and Development, 2000), 46.

¹³ Francis Fukuyama, “What Is Governance?,” Working Paper 314 (Washington, DC: Center for Global Development, 2013), 3.

coordination, and increased effectiveness.¹⁴ Together, these build on the design of individual governance models to create a power structure that makes good decisions, maintains relationships with stakeholders, and holds itself accountable. Baret et al. argue that without these four tenets, governance is doomed to fail.¹⁵

The United Nations Development Programme (UNDP) evaluates types of governance around the globe. In defining good governance, the UNDP looks for systems with four characteristics: capability, responsiveness, inclusiveness, and transparency.¹⁶ The UNDP evaluates how these defining traits are needed for the overall mission of governance and how the absence of these characteristics often defines poor governance.

There are striking similarities between the four tenets of good governance proposed by Baret et al. and the UNDP's four characteristics. For example, the UNDP speaks of a "capable" system while Baret et al. describe one that is "effective." Also, while the UNDP uses "responsive," Baret et al. use "enhanced coordination," and while the UNDP uses "inclusive," Baret et al. use "accountable." Finally, both sources maintain that transparency is a necessary component of good governance. As this thesis progresses, it examines governance models with these four characteristics as a framework for good governance.

The research suggests that not only does governance matter, but the process of governance is just as important. Many scholars agree that an easy way to add value to the governance board is to create advisory councils. The research shows that advisory councils can play an important role in governance by providing valuable input and advice to decision-makers. A study by Sabatier and Jenkins-Smith in 1993 found that advisory councils can be effective at increasing the participation of stakeholders in the policy-

¹⁴ Scott Baret et al., *Developing an Effective Governance Operating Model: A Guide for Financial Services Boards and Management Teams* (London: Deloitte, 2013), <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Financial-Services/dttl-fsi-US-FSI-Developinganeffectivegovernance-031913.pdf>.

¹⁵ Baret et al.

¹⁶ Yoshihiro Saito, "Is Good Governance a Necessary Precursor to Peace?," *United Nations Development Programme* (blog), January 15, 2021, <https://www.undp.org/blog/good-governance-necessary-precursor-peace>.

making process, which can lead to more informed and effective decisions.¹⁷ Notably, Sabatier and Jenkins-Smith also state that advisory councils have limitations, especially when there is a lack of clear goals or when there are “competing interests among the council members.”¹⁸

There is also a robust body of literature on the importance of oversight, and how a program without oversight often lacks transparency and interagency trust. Roelofs discusses the importance of oversight and the interrelation between trust and transparency in government in his article for the journal *Governance*.¹⁹ Roelofs speaks to the need for oversight, observing that while those in power might claim they “hide nothing,” words alone do not make what he refers to as an “open government.” The need for open government involves the complex “notions of authenticity and honesty,” as described in Fenster’s book *The Transparency Fix*.²⁰ Fenster further notes that often the need for government transparency also drives secrecy advocates.

Much expert literature today describes how cooperation and collaboration between agencies or people can lead to trust, transparency, and coordination. These are all key aspects to building networks of people to share information, set common goals, and establish open channels of communication. A study by Riggio and Reichard found that cooperation and collaboration between organizations led to increased trust and transparency.²¹ Another study, by Ansell and Gash, found that collaboration between

¹⁷ Paul Sabatier and Hank C. Jenkins-Smith, “Evaluating the Advocacy Coalition Framework,” *Journal of Public Policy* 14, no. 2 (1994): 175–203, <https://doi.org/10.1017/S0143814X00007431>.

¹⁸ Sabatier and Jenkins-Smith.

¹⁹ Portia Roelofs, “Transparency and Mistrust: Who or What Should Be Made Transparent?” *Governance* 32, no. 3 (2019): 566, <https://doi.org/10.1111/gove.12402>.

²⁰ Mark Fenster, *The Transparency Fix: Secrets, Leaks, and Uncontrollable Government Information* (Stanford: Stanford University Press, 2017), 173.

²¹ Ronald Riggio and Rebecca J. Reichard, “The Emotional and Social Intelligences of Effective Leadership: An Emotional and Social Skill Approach,” *Journal of Managerial Psychology* 23, no. 2 (February 2008), <https://doi.org/10.1108/02683940810850808>.

organizations led to increased efficiency and effectiveness in the delivery of public services.²²

Nonetheless, most scholars agree that governance is a complex concept, usually referring to the processes and structures through which power is exercised and accountability is maintained in an organization or society. Synthesizing experts' advice in the production of good governance is crucial for establishing clear decision-making processes, communicating openly and transparently with stakeholders, and actively engaging stakeholders in decision-making processes.

2. Technology

The literature shows that the modern world requires that managers use up-to-date technologies, especially tracking methods, to administer federal grant-funded items. Researchers in this field often highlight two software technologies that help to provide a collaborative approach to program management of the LAA UASI: asset management and common operating picture software.

The first technological innovation researchers often examine is asset management software. In using cutting-edge technologies, especially to track purchases from federal grants, unintended waste follows because of unintentional duplication in uncoordinated management systems. In fact, the Government Accountability Office (GAO) provides an annual review of duplication throughout government enterprises. Duplication, according to the Office of Management and Budget, involves “two or more agencies engag [ing] in the same activities or provid [ing] the same services to the same beneficiaries.”²³ To minimize duplicative procurement and capabilities, researchers suggest implementing asset management technologies. Experts say that asset management strategies effectively reduce costs for businesses, government entities, and the education sector.

²² Chris Ansell and Alison Gash, “Collaborative Governance in Theory and Practice,” *Journal of Public Administration Research and Theory* 18, no. 4 (October 2008): 543–71, <https://doi.org/10.1093/jopart/mum032>.

²³ Office of Management and Budget, “Stopping Wasteful and Unnecessary Spending,” in *A Budget for America's Future: Budget of the U.S. Government* (Washington, DC: Office of Management and Budget, May 2020), 14, <https://www.govinfo.gov/content/pkg/BUDGET-2021-BUD/pdf/BUDGET-2021-BUD.pdf>.

Collaboration across agencies requires technologies that help agencies track assets. The research shows that asset management is a tool to achieve a collaborative mission between agencies or departments.²⁴ According to Hastings, asset management is “a systematic approach to the management of physical assets from concept to disposal.”²⁵ He explains, the “general principles . . . are to make them accessible to a wide audience.”²⁶ Asset management tracks available resources and achieves higher levels of effectiveness in reaching organizational objectives. Furthermore, a failure to track assets appropriately guarantees that significant losses will follow.²⁷ For these reasons, research demonstrates that an asset management system is vital to any type of grant funding.

However, some counterarguments exist in the literature. For one, in his report for the United Nations Economic Commission for Latin America and the Caribbean, Epstein explains that asset management is expensive, and the maintenance required is labor intensive.²⁸ Moreover, Epstein describes that some agencies require inputs that are not available for common software platforms.²⁹ Nonetheless, the reality is that agencies or stakeholders implementing an asset management system will spend heavily up front. Research about these cutting-edge technologies for asset management shows their worth over time in reducing costs for all kinds of organizations and sectors.

Overwhelmingly, most researchers believe that the savings from averting duplication, losses, and theft far outweigh the costs. Aside from the monetary savings, the most significant benefit is the “real-time information” and “situational awareness” that

²⁴ “Common Operating Picture for Emergency Responders,” Department of Homeland Security, System Assessment and Validation for Emergency Responders Program, September 2008, https://www.dhs.gov/sites/default/files/publications/CommonOpER_HLT_0908-508.pdf.

²⁵ Nicholas Anthony John Hastings, *Physical Asset Management with an Introduction to ISO55000*, 2nd ed. (Cham, Switzerland: Springer, 2015), xxxi, <https://doi.org/10.1007/978-3-319-14777-2>.

²⁶ Hastings, 3.

²⁷ Raymond H. Peterson, *Accounting for Fixed Assets*, 2nd ed. (New York: Wiley, 2002).

²⁸ Gerald Epstein, *The Asset Management Industry in the United States*, Financing for Development Series 271 (Santiago: United Nations Economic Commission for Latin America and the Caribbean, 2019), https://repositorio.cepal.org/bitstream/handle/11362/45045/1/S1900994_en.pdf.

²⁹ Epstein.

provide immediate tactical coordination and predictive information analysis.³⁰ If software could track assets in real time, when a regional asset is needed for some large-scale incident, predictive software could assist managers in requesting it for the response.

The second technological innovation the research has deemed lucrative is common operating picture (COP) software. Research shows that COP software platforms are tools that allow multiple organizations or agencies to share and access real-time information in a coordinated manner. The literature on COP platforms highlights several key findings. First, the use of COP software can improve communication and information sharing among organizations. Danielsson, Alvinus, and Larsson maintain that the “operating picture is influenced by information coming together from different sources and formatting a snapshot of the event, a portrait which changes and is updated over time, while organizational belonging, role and occupationally specific knowledge provide a framework for and influence situational awareness.”³¹ Similarly, in a study on the petrochemical industry, COP software was shown essential in managing a large oil spill in the Gulf of Mexico, as described by Davis and Fernandes in their video.³² Overall, the literature suggests that COP software platforms are a valuable tool for enabling cooperation among organizations and agencies. COP software platforms can improve communication, collaboration, and decision-making, leading to more effective and efficient coordination among multiple stakeholders.

3. Training

A final area of discussion involves the training needs of the UASI. Conceptually, training is a hallmark of good decision-making. The literature highlights the importance of incorporating strategies such as needs assessments, engaging training design, the transfer

³⁰ Bruce R. Norquist, “Common Operating Picture and Planning Environment for Disaster Response,” (paper presented at the 13th International Command and Control Research and Technology Symposia, Seattle, WA, June 2008), <https://apps.dtic.mil/sti/citations/ADA486784>.

³¹ Erna Danielsson, Aida Alvinus, and Gerry Larsson, “From Common Operating Picture to Situational Awareness,” *International Journal of Emergency Management* 10, no. 1 (2014): 28, <https://doi.org/10.1504/IJEM.2014.061659>.

³² “Common Operating Picture for Oil and Gas,” September 26, 2017, Esri, video, 28:07, https://mediaspace.esri.com/media/t/1_mcgkk5ji.

of learning, and training effectiveness to increase the effectiveness of training programs. Organizations that prioritize these training strategies are likely to see an improvement in performance, which can lead to increased productivity.

The Manpower Services Commission, a 1974 national body established to coordinate vocational training in the United Kingdom, defined *training* as follows: “A planned process to modify attitude, knowledge, skill or behavior through learning experience to achieve effective performance in an activity or range of activities. Its purpose, in the work situation, is to develop the abilities of the individuals and to satisfy the current and future needs of the organization.”³³ Further analysis by Milhem, Abushamsieh, and Pérez Aróstegui aligns the benefits of training with its goals—what this thesis calls the mission of the program. These researchers state, “This [alignment] involves defining and prioritizing the organization’s mission and the training unit’s mission and performance objectives.”³⁴

According to Bahlis and Tourville, training needs can be determined in Step 6 of their process for defining training needs, “identify [ing] the knowledge and skills gaps. Existing and potential gaps may be revealed by comparing the knowledge, skills, and attitudes needed by each group to achieve the desired level of performance, with the current knowledge, skills, and attitudes of the group.”³⁵ Nonetheless, researchers agree that a needs assessment should identify the skills gaps of employees and use strategies to fill these gaps with learning, mentoring, or coaching tailored to them.

³³ Mousa Masadeh, “Training, Education, Development and Learning: What Is the Difference?” *European Scientific Journal* 8, no. 10 (May 2012): 62, <https://doi.org/10.19044/esj.2012.v8n10p%p>.

³⁴ Wajdi Milhem, Khalil Abushamsieh, and Maria Nieves Pérez Aróstegui, “Training Strategies, Theories and Types,” *Journal of Accounting—Business & Management* 21, no. 1 (2014): 15, https://www.researchgate.net/profile/Khalil-Abushamsieh/publication/269165999_Training_strategies_theories_and_types/links/549dce060cf2fedbc311998f/Training-strategies-theories-and-types.pdf.

³⁵ Jay Bahlis and Stephen Tourville, “Where Training Resources Should Be Allocated” (paper presented at the Interservice/Industry Training, Simulation, and Education Conference, 2005), Wiley Online.

4. Four Actions Framework

A final area to review is the framework on which this thesis is based—Kim and Mauborgne’s four actions framework, also known as the blue ocean strategy.³⁶ This method uses four questions to frame different ideas regarding business strategies:

- Which factors should be *eliminated*?
- Which factors should be *reduced*?
- Which factors should be *increased*?
- Which factors do not exist that should be *created*?³⁷

According to Kim and Mauborgne, “the creators of blue oceans . . . followed a strategic logic that we call value innovation . . . because instead of focusing on beating the competition, you focus on making the competition irrelevant by creating a leap in value for . . . your [organization]”—in this case, the program administration of the LAA UASI.³⁸

One of the things agencies often do is consider programs or solutions provided by other similar agencies. Many public service agencies think that if a policy is working in another jurisdiction, it could easily be repurposed. In other words, if an agency wants to implement a driving policy, it looks to another agency with a driving policy and replicates the policy for its own use. The agency conducts no study or beta testing but merely falls in line with what other agencies are doing.

The blue ocean strategy, however, models a framework for an agency or business to evaluate its activities and determine how to get away from all competitors. In business, the competition draws blood for similar resources, what Kim and Mauborgne call “red waters.” To find blue oceans, the organization has to offer something that leaves the competition in the dust. This model eliminates the need to recreate what other agencies are doing and encourages something completely different and innovative. Kim and Mauborgne argue that organizations need to create new market value by doing something innovative—

³⁶ W. Chan Kim and Renée Mauborgne, *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant* (Cambridge: MA: Harvard Business School Press, 2005).

³⁷ Kim and Mauborgne, 35.

³⁸ Kim and Mauborgne, 12.

that no one else is doing. A paradigm shift could, thus, materialize for the entire regional approach to homeland security by creating collaborative networks.

C. RESEARCH DESIGN

This thesis aims to derive a more cooperative and collaborative method or approach for the dispersal of federal grants that support the Los Angeles regional area's public safety departments, focusing chiefly on fire departments. The research centered on proven strategies to build interagency cooperation with a mission-oriented focus. The research examined ways to modify the current grant system into a cooperative regional approach to benefit the region's security.

First, this study explored the reasons behind the federal granting of the UASI and the historical framework of the program. Then, it analyzed the specific grant guidance for the Los Angeles region and any historical reports completed by the regional UASI board. This historical perspective provided context for the recommendations and guidance.

Next, the research looked to other models of governance. Because each UASI area is unique, each has its own governing bodies and funding procurement needs. The research explored definitions of governance and demonstrated examples of good governance as a foundation for describing how good governance is achieved for differing models. Many types of governance models exist, from regional governance boards, to special purpose districts, to wildland districts, to other regional fire service governance boards. Looking at many of these alternative governance models assisted this author in determining what worked well to identify additional solutions for the LAA UASI governance board.

This thesis has drawn heavily from local and federal granting audit reports, which are required periodically to maintain grant funding, to determine what has worked well and what needs improvement. These reports, effectively after-action reports, helped to derive meaning from complex, large-scale grant projects. This process helped to determine what was ideal and achievable. The goal was to build on other complex governance boards' cohesive, collaborative approaches and use those examples to the LAA UASI's advantage.

The next phase was to model these new ideals or positive changes through a framework that measured whether these modifications would work, specifically in the LAA. This process involved analyzing the current system of grant funding with the four actions framework, also known as the blue ocean strategy.³⁹

This thesis focused on the overarching assertion that local jurisdictions desire to make their unique areas safe. Although individual area leaders might share this worthy goal, the UASI program as a whole faces some important challenges that limit the achievement of that goal. This thesis has drawn heavily on a GAO report by William Jenkins, highlighting many of the program’s shortcomings and laying the foundation for improving collaboration through a regional approach.⁴⁰ Collaboration and continuity are critical in building unity aligned with mission orientation.

This thesis relied mainly on public data sources and reports released by agencies that are part of the federal grant process, including DHS, the Federal Emergency Management Agency (FEMA), the National Fire Protection Agency, Congress, and many more. This author reviewed LAA UASI reports and records produced throughout the years to gain an understanding of the processes, historical context, and thoughts on best practices.

The conclusion reflects great thought on how to create the best possible framework for the program as a whole, including the size of the city, the scope of the projects, and the cost of implementation. As with any improvement project, this one has its costs; however, the research showed that not implementing the project might be disastrous and expensive. In the recommendations section, the color-coded tables indicate the current state of the program adjacent to the desired end state. For the most part, getting to the end state has a simple solution, one that needs a bit of shared purpose for the leaders to “make it happen.”

³⁹ Kim and Mauborgne.

⁴⁰ William O. Jenkins Jr., *Urban Area Security Initiative: FEMA Lacks Measures to Assess How Regional Collaboration Efforts Build Preparedness Capabilities*, GAO-09-651 (Washington, DC: Government Accountability Office, 2009), 2–4, <https://www.gao.gov/assets/gao-09-651.pdf>.

D. THESIS ROADMAP

Chapter II presents a historical overview of the UASI, examining its ramifications and relation to the Homeland Security Act of 2002 and the creation of DHS.⁴¹ As the federal counterterrorism agency, DHS relies on local agencies to partner in the actual work of this mandate and hence funds their efforts with the UASI grant. Chapter III examines the Los Angeles region through three lenses: its history of UASI funding, the UASI governance structure, and current threats. This chapter makes the case that while some issues create division and a lack of continuity, the area has a history of collaboration, especially in multijurisdictional responses to wildfires, and innovation in areas such as NIMS. Chapter IV explores potential remedies for some of the issues discussed in the previous chapter, focusing on the areas of governance, technology, and training. It demonstrates how governance fosters networks and integration; how asset management and COP software systems can build structures for seamless situational awareness among managers across agency types and executive styles; and how training is crucial in delivering mission-oriented systems that lend the overarching principles of regional security. Using the four actions framework, Chapter V examines new strategies for building collaborative networks. Chapter VI offers specific remedies for the challenges facing the LAA UASI through innovative governance, technology, and training strategies.

⁴¹ Homeland Security Act of 2002, Pub. L. No. 107–296, 116 Stat. 2135 (2002), https://www.dhs.gov/xlibrary/assets/hr_5005_enr.pdf.

II. UASI 101: THE FEDERAL GRANT PROCESS

This chapter presents a historical review of the largest grant program enacted after the tragic events of 9/11. The attacks on the World Trade Centers in New York City and the Pentagon in Arlington, Virginia, and the thwarted attack of United Flight 93 that crashed in Shanksville, Pennsylvania, demonstrated the devastating consequences of terrorism and the need for increased preparedness and resilience. The UASI was created to establish funding to support high-threat, high-density urban areas to protect against further terror activity.⁴² The history of the UASI grant project provides a backdrop and context for the mission and demonstrates how the program has changed over time. The events of 9/11 are a reminder that the ongoing threat of terrorism is a problem best handled by local authorities. Thus, the UASI program is a federal tool for ensuring that municipalities are prepared to meet this threat.

A. GOING BACK IN TIME

Our Nation learned a painful lesson on September 11. American soil is not immune to evil or cold-blooded enemies capable of unprecedented acts of mass murder and terror. The worst of these enemies—and target number one in our war on terrorism—is the terrorist network Al Qaeda. Yet the threat to America is not limited to Al Qaeda—or to suicide hijackings of commercial aircraft. As we learned on October 4, 2001, a Florida man named Robert Stevens became the first known victim of an unprecedented act of biological terrorism.

A new wave of terrorism, involving new weapons, looms in America's future. It is a challenge unlike any ever faced by our Nation. But we are not daunted. We possess the resources and the determination to defeat our enemies and work to secure our homeland against the threats they pose.

—George Bush, *Securing the Homeland, Strengthening the Nation*⁴³

To begin the process of securing the nation from foreign and domestic terror threats, the federal government enacted the Uniting and Strengthening America by Providing

⁴² Homeland Security Grants, “Urban Areas Security Initiative (UASI) Program.”

⁴³ George Bush, *Securing the Homeland, Strengthening the Nation* (Washington, DC: White House, 2002), 2, https://www.dhs.gov/sites/default/files/publications/homeland_security_book.pdf.

Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT) Act of 2001. The PATRIOT Act's architects saw the impact to the community as first responders risked their lives, many paying the ultimate sacrifice, in response to the acts of terrorism on American soil. Its framers understood that those who respond to attacks need more tools and personnel—which also require increased funding. Thus, the federal government allocated funding to improve homeland defense and security through the following mechanisms:

- Funding for counterterrorism efforts through the U.S. Treasury, known as the Counterterrorism Fund,
- Grant programs for state and local domestic preparedness support,
- Enhanced presidential authority,
- Fortified surveillance procedures, including the no-fly list,
- Efforts to close loops for terror money laundering,
- Protection of international borders with the United States,
- Fewer obstacles to investigating terrorism,
- Stronger criminal laws against terrorism,
- Improved intelligence, including “electronic surveillance,” and
- Critical infrastructure protection.⁴⁴

Nevertheless, the PATRIOT Act did not directly create the UASI program. Instead, it provided the legislative framework and funding for DHS to establish the program shortly thereafter. The PATRIOT Act authorized DHS to conduct threat assessments and allocate

⁴⁴ Uniting and Strengthening America by Providing Appropriate Tools Required to Interrupt and Obstruct Terrorism (USA PATRIOT) Act of 2001, Pub. L. No. 107–56, 115 Stat. 272 (2001), <https://www.congress.gov/107/plaws/publ56/PLAW-107publ56.pdf>.

funding to high-threat areas, which became a critical component of the national effort to prepare for and react to terrorism.⁴⁵

Soon after the PATRIOT Act of 2001, Congress passed the Homeland Security Act of 2002, which chiefly created DHS.⁴⁶ According to this statute, the mission of DHS is to

- A) prevent terrorist attacks within the United States;
- B) reduce the vulnerability of the United States to terrorism;
- C) minimize the damage, and assist in the recovery, from terrorist attacks that do occur within the United States;
- D) carry out all functions of entities transferred to the Department [of Homeland Security] by acting as a focal point regarding natural and manufactured crisis and emergency planning;
- E) ensure that functions of the agencies and sub-divisions within the Department that are not related directly to securing the homeland are not diminished or neglected. . . .
- F) ensure that the overall economic security of the United States is not diminished by efforts, activities, and programs aimed at securing the homeland; [and]
- G) monitor connections between illegal drug trafficking and terrorism, coordinate efforts to sever such connections, and otherwise contribute to efforts to interdict illegal drug trafficking. . . .

[Furthermore], except as specifically provided by law with respect to entities transferred to the Department under this Act, primary responsibility for investigating and prosecuting acts of terrorism shall be vested not in the Department, but rather in Federal, State, and local law enforcement agencies with jurisdiction over the acts in question.⁴⁷

The Homeland Security Act of 2002 charged the newly created DHS with managing all federal grant projects that dealt with homeland security for the entire country, which also entailed managing grant programs that were established before 9/11. In fact, leading up to 2001, three federal grant programs had been developed to address homeland

⁴⁵ USA PATRIOT Act.

⁴⁶ Homeland Security Act of 2002.

⁴⁷ Homeland Security Act of 2002, § 101.

security for state and local governments: the State Domestic Preparedness Program run by the Department of Justice, the Metropolitan Medical Response System run by the Department of Health and Human Services, and the Emergency Management Performance Grant administered by FEMA.⁴⁸ These federal programs could address broad federal-level issues, but they lacked a comprehensive approach for local, state, and federal partners.

In 2003, DHS Secretary Tom Ridge explained to Congress that the “UASI was needed to combat terror,” emphasizing the importance of making “measurable” security gains in “critical” cities.⁴⁹ Secretary Ridge stated, “We know that to defend the homeland, we must start by defending the hometown. We must defend our cities across America. And the mission, the purpose of the Urban Areas Security Initiative, is to build a sustainable and measurable increase in the capability of these critical urban areas so we can defend them.”⁵⁰ A few years later, the GAO further defined the UASI program: “The UASI grant program is designed to distribute federal funding to an urban region composed of multiple local governments and first responder agencies rather than a single city.”⁵¹ The 9/11 attacks made it abundantly clear that a more comprehensive and coordinated approach was needed to address the evolving threats posed by terrorism to the country. What was gleaned by the responses to large-scale terror acts was that local agencies were the first and primary responders to the initial attack. Local agencies, tasked with the initial response, would therefore need increased support from federal programs.

Immediately after the creation of DHS, several additional homeland security grant programs were added. Notably, the bulk of these programs were intended to provide local agencies with increased capacity in terrorism response:

- State Homeland Security Grant Program,

⁴⁸ William L. Painter, *Issues in Homeland Security Policy for the 112th Congress*, CRS Report No. R42025 (Washington, DC: Congressional Research Service, 2011).

⁴⁹ Tom Coburn, *Safety at Any Price: Assessing the Impact of Homeland Security Spending in U.S. Cities* (self-pub., 2012), 11, <https://info.publicintelligence.net/SenatorCoburn-UASI.pdf>.

⁵⁰ Tom Ridge, “Remarks at the Urban Area Security Initiative Conference” (Urban Area Security Initiative Conference, Milwaukee, WI, September 13, 2004).

⁵¹ Jenkins, *Urban Area Security Initiative*, 1.

- State Homeland Security Program,
- UASI,
- Operation Stonegarden grant program,
- Driver's License Security Grant Program, known as the REAL ID initiative,
- Regional Catastrophic Preparedness Grant Program,
- Rail and Transit Security Grant Programs,
- Port Security grants,
- Over-the-Road Bus Security Assistance,
- Buffer Zone Protection Program,
- Interoperable Emergency Communications Grant Program, and
- Emergency Operations Grant Program.

Of all these programs, this thesis explores the creation of the UASI program, which has driven technical assistance, training, and equipment purchases for local participating urban areas. The UASI grant has enhanced the capacity of urban cities to prevent, protect against, and respond to acts of terrorism.⁵²

On August 29, 2005, Hurricane Katrina made landfall in southeast Louisiana, with significant impacts on the New Orleans area.⁵³ The impact of Katrina demonstrated the need for increased preparedness and resilience, not only against acts of terrorism but also against natural disasters. The Post-Katrina Emergency Management Reform Act of 2006 transferred the responsibility of allocating and managing DHS grants to FEMA.⁵⁴ FEMA's

⁵² Currie, *Homeland Security Grant Program*.

⁵³ William O. Jenkins Jr., *Actions Taken to Implement the Post-Katrina Emergency Management Reform Act of 2006*, GAO-09-59R (Washington, DC: Government Accountability Office, November 21, 2008), <https://www.gao.gov/assets/gao-09-59r.pdf>.

⁵⁴ Jenkins, 12.

leadership realized that many of the capabilities needed to prepare for and respond to terrorism were inherent in natural disasters and pandemics as well. This realization marked a significant shift in the UASI program's goals—from countering terrorism to consolidating risks in preparedness and response to major disasters. FEMA's role was further refined following the release of recommendations in the 9/11 Commission Act of 2007.⁵⁵ The principal change from this statute was to use a new risk analysis formula, which, as of this writing, has not substantially changed. The risk analysis formula is discussed further in the next section.

B. PURPOSE OF UASI GRANTS AND KEY COMPONENTS

The purpose of the UASI program is to “support regional collaboration among local jurisdictions and emergency response organizations.”⁵⁶ It is this mission of regional collaboration that this thesis explores further in attempting to demonstrate its importance and providing lasting solutions to meet a collaborative end state.

DHS realized that the UASI was not the solution for smaller areas that also required security funding, so it implemented the State Homeland Security Program (SHSP).⁵⁷ Specifically, many leaders of urban areas not covered by the UASI felt their needs in funding had been overlooked. Thus, the SHSP program was created by the federal government to “fund planning, equipment, training, exercises and grant administration for emergency prevention, preparedness and response.”⁵⁸ While this program has many similar overarching goals and requirements to the UASI, it aims to fill some of the gaps from the UASI framework and its qualifications. According to the grant language, “All states and territories are to receive a minimum grant amount required by law, based on a

⁵⁵ Implementing Recommendations of the 9/11 Commission Act of 2007, Pub. L. No. 110–53, 121 Stat. 266 (2007), <https://www.intelligence.senate.gov/sites/default/files/laws/pl11053.pdf>.

⁵⁶ Jenkins, *Urban Area Security Initiative*, 1.

⁵⁷ Currie, *Homeland Security Grant Program*, 3.

⁵⁸ Eric Garcetti, “Fiscal Year 2018 State Homeland Security Grant Acceptance” (official memorandum, Los Angeles: City of Los Angeles, 2019), 1, http://clkrep.lacity.org/onlinedocs/2019/19-0051_rpt_MAYOR_01-16-2019.pdf.

percentage of the total amount of SHSP and UASI appropriations in a given fiscal year.”⁵⁹ The defining feature, then, of the SHSP is that its funding can be awarded without the high-risk urban area designation.⁶⁰

1. General Funding Procedures and Requirements

Upon initial funding of the UASI grant, the list included just seven of the largest U.S. urban areas: the California Bay Area, Los Angeles and Long Beach, the National Capital Region, Chicago, New York City, Houston, and Seattle.⁶¹ Rebecca Nash, whose work appears in *Criminology, Criminal Justice, Law & Society*, states that these locations comprise the “highest risk urban areas in the United States for possible future terrorist attacks.”⁶² The initial list of seven areas grew rapidly, and by 2004, the list had nearly quadrupled, to 31 cities.⁶³ The grant’s designers intended that the UASI program would use a risk analysis to prioritize spending.⁶⁴ According to a 2018 GAO report, the methodology for grant allocations involves three steps. First, an empirical risk analysis model is applied to calculate the risk of the area based on a combination of threat, vulnerability, and consequences.⁶⁵ Second, each urban area submits its investment justifications with its application to the UASI. Third, an allocation decision is determined by the area risk score, which is explained later in this chapter.⁶⁶

⁵⁹ Currie, *Homeland Security Grant Program*, 4.

⁶⁰ Federal Emergency Management Agency, *Fiscal Year 2022 Preparedness Grants Manual*, FEMA Manual 207–22–0001 (Washington, DC: Federal Emergency Management Agency, 2022), 7.

⁶¹ Coburn, *Safety at Any Price*.

⁶² Rebecca M. Nash, “Predicting the Impacts of Urban Area Security Initiative Funding on Terrorist Incidents in the United States,” *Criminology, Criminal Justice, Law & Society* 18, no. 2 (January 2017): 2, <https://ccjls.scholasticahq.com/api/v1/articles/1989-predicting-the-impact-of-urban-area-security-initiative-funding-on-terrorist-incidents-in-the-united-states.pdf>.

⁶³ Coburn, *Safety at Any Price*.

⁶⁴ Coburn, 14.

⁶⁵ Currie, *Homeland Security Grant Program*.

⁶⁶ William O. Jenkins Jr., *DHS Risk-Based Grant Methodology Is Reasonable, but Current Version’s Measure of Vulnerability Is Limited*, GAO-08-852 (Washington, DC: Government Accountability Office, 2008), 6, <https://www.gao.gov/assets/gao-08-852.pdf>.

While the grant’s framers understood that cities could never completely eliminate the threat of terrorism, they did enact a methodology to “buy down risk,” so an annual risk analysis would be a critical factor, as laid out in the Homeland Security Act of 2002.⁶⁷ Such analysis looks at the 100 most populous metropolitan statistical areas (MSAs)—“geographical region [s] with a relatively high population density . . . and close economic ties throughout the area”—as designated by the Office of Management and Budget.⁶⁸ As of 2015, the annual requirement of assessing the 100 most populous MSAs became the responsibility of FEMA.⁶⁹ Furthermore, DHS expects that UASI funding eligibility correlates directly with an MSA’s risk assessment.⁷⁰

Once the relative risk score is determined, areas that qualify for grants are sorted into two groups, or “tiers.” Tier 1 is given the highest priority based on the highest relative risk, with the remaining urban areas categorized as Tier 2.⁷¹ At one point, DHS had 64 UASI program locations, but as of this writing, there are 36 eligible urban areas across the continental United States. As of fiscal year 2022, Tier 1 MSAs include Los Angeles/Long Beach, the San Francisco Bay, the National Capital Region, Chicago, Boston, Jersey City/Newark, New York City, Philadelphia, Houston, and Dallas/Fort Worth/Arlington. These areas possess the unique size and density that necessitate enhanced capabilities for dealing with threats. The tiers equate to differences in grant awards, with the MSA score determining whether greater funds are required to reduce more significant risk.

⁶⁷ Jenkins.

⁶⁸ Currie, *Homeland Security Grant Program*, 10.

⁶⁹ *Creating a More Resilient Nation: Stakeholders’ Perspectives: Hearing before the Subcommittee on Emergency Preparedness, Response, and Recovery, Committee on Homeland Security, House of Representatives*, 117th Cong., 2nd sess. (2022), 14, <https://www.congress.gov/117/chrg/CHRG-117hhr48404/CHRG-117hhr48404.pdf>.

⁷⁰ Currie, *Homeland Security Grant Program*, 10.

⁷¹ Todd Masse, Siobhan O’Neil, and John Rollins, *The Department of Homeland Security’s Risk Assessment Methodology: Evolution, Issues, and Options for Congress*, CRS Report No. RL33858 (Washington, DC: Congressional Research Service, 2007), 12, <https://sgp.fas.org/crs/homsec/RL33858.pdf>.

2. A Risk Analysis Approach to Funding Preparedness

The strategic direction of preparedness for terrorism and large-scale disasters, consistent with the UASI grant, has changed slightly over the last 20-plus years. Government officials from the ranks of first responder agencies, as well as “quasi-governmental authorities . . . like ports and transit agencies,” have the collective responsibility of overseeing individual regions’ UASI funding.⁷² These members are responsible for coordinating the development and implementation of UASI projects and programs. Additionally, they develop a governance structure in the form of a board—as discussed and analyzed later in this work—that submits an annual strategic plan outlining the region’s goals, objectives, and steps for implementation of programs to enhance regional preparedness. This strategy, called the Urban Area Homeland Security Strategy, steers the UASI region’s strategic direction.⁷³

In 2007, DHS released the *National Preparedness Guidelines* (NPG), which included national homeland security priorities. According to the document, “The NPG aligns national efforts by using national planning scenarios that represent a wide range of catastrophic terrorist attacks and natural disasters that would stretch the Nation’s prevention, protection, and response capabilities.”⁷⁴ Along with the priorities were a list of 37 “target capabilities” or tactical operations that areas needed to develop, maintain, and perform (see Table 1 for an abridged list). According to the grant specifications, the UASI had to directly correlate funding needs with the scope of national priorities and target capabilities.

⁷² Jenkins, *Urban Area Security Initiative*.

⁷³ Jenkins, 7.

⁷⁴ Homeland Security Council, *National Strategy for Homeland Security* (Washington, DC: Homeland Security Council, 2007), 42–44, https://www.dhs.gov/xlibrary/assets/nat_strat_homelandsecurity_2007.pdf.

Table 1. National Priorities and Associated Capabilities, 2007.⁷⁵

National Priority	Associated Capabilities
Expand Regional Collaboration	Multiple capabilities
Implement the National Incident Management System and National Response Plan	Multiple capabilities
Implement the National Infrastructure Protection Plan	Multiple capabilities
Strengthen Information Sharing and Collaboration Capabilities	Intelligence/Information Sharing and Dissemination Counter-Terror Investigations and Law Enforcement
Strengthen Interoperable and Operable Communications Capabilities	Communications Emergency Public Information and Warning
Strengthen CBRNE Detection, Response, and Decontamination Capabilities	CBRNE Detection Explosive Device Response Operations WMD/Hazardous Materials Response and Decontamination
Strengthen Medical Surge and Mass Prophylaxis Capabilities	Medical Surge Mass Prophylaxis
Strengthen Planning and Citizen Preparedness Capabilities	Planning Citizen Evacuation and Shelter-in-Place Mass Care (Sheltering, Feeding, and Related Services) Community Preparedness and Participation

The national scenarios list, as outlined in Table 2, gave federal oversight to local areas to ensure that the latter allocated resources in alignment with their necessity. Defining these 15 highly plausible scenarios that could disrupt the national security of the United States allowed local areas some flexibility in devising security measures. Wise and Nader maintain that such flexibility is important in homeland security because “local governments arguably have the best knowledge of their territory and are best suited to address specific, localized needs.”⁷⁶

⁷⁵ Source: Department of Homeland Security, *National Preparedness Guidelines* (Washington, DC: Department of Homeland Security, 2007), 11, https://www.fema.gov/pdf/emergency/nrf/National_Preparedness_Guidelines.pdf.

⁷⁶ Charles R. Wise and Rania Nader, “Organizing the Federal System for Homeland Security: Problems, Issues, and Dilemmas,” *Public Administration Review* 62, no. S1 (September 2002): 49, <https://doi.org/10.1111/1540-6210.62.s1.8>.

Table 2. National Planning Scenarios, 2007.⁷⁷

Scenario Name	CBRNE Attack Type
Improvised nuclear device	Nuclear
Aerosol anthrax	Biological
Pandemic influenza	Biological
Plague	Biological
Blister agent	Chemical
Toxic industrial chemical	Chemical
Nerve agent	Chemical
Chlorine tank explosion	Chemical
Major earthquake	Natural
Major hurricane	Natural
Radiological dispersal device	Radiological
Improvised explosive device	Explosive
Food contamination	Biological
Foreign animal disease	Biological
Cyber attack	Cyber

FEMA determined that in order to achieve these national priorities, a strategy of regional application to the grant had to be implemented.⁷⁸ This shift started with the implementation of regional collaboration in communications platforms. Not only was “expanding regional

⁷⁷ Adapted from Department of Homeland Security, *National Preparedness Guidelines*, 31.

⁷⁸ Nicole A. Errett et al., “Regional Collaboration among Urban Area Security Initiative Regions: Results of the Johns Hopkins Urban Area Survey,” *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 12, no. 6 (December 2014): 358, <https://doi.org/10.1089/bsp.2014.0057>.

collaboration” a fundamental national priority, but it also became a fundamental principle for grant allocation.⁷⁹

As of this writing, the current system has altered many of the core capabilities. According to FEMA’s *2022 Preparedness Grants Manual*, this new system has a stronger tie to the revised national priorities, including

- Enhancing cybersecurity,
- Protecting soft targets and crowded places,
- Improving information and intelligence sharing and cooperating with federal agencies, including DHS,
- Combating domestic violent extremism, and
- Addressing emergent threats (e.g., transnational criminal organizations, unmanned aircraft systems, and WMDs).⁸⁰

C. CONCLUSION

This chapter has provided a historical perspective on the federal UASI funding program. Since the events of 9/11, federal money has been granted to MSAs to minimize the risk of being targeted by evildoers. The success of the program has increased the demand for funding as well as broadened the scope of spending. The result has been an expansion of the areas receiving federal funds. Initially, the approach of spending was to keep local agencies on task with the national priorities and national scenarios lists. These lists did well to give local response agencies flexibility in administering their programs for the overall mission of homeland security. After Hurricane Katrina, initiatives changed, broadening the scope of potential allocations. Threats have also evolved, thus creating further demand for future program enhancement. As of this writing, the grant encompasses

⁷⁹ Jenkins, *Urban Area Security Initiative*, 23.

⁸⁰ “The Department of Homeland Security (DHS) Notice of Funding Opportunity (NOFO) Fiscal Year 2023 Homeland Security Grant Program,” Federal Emergency Management Agency, February 27, 2023, <https://www.fema.gov/grants/preparedness/homeland-security/fy-23-nofo>.

an “all-hazards” approach, which allows regions to spend their awards outside the directed scope of the terrorism playbook. While the evolution of the UASI program was necessary, it has set the stage for potential conflicts.

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III. THE HISTORY, OPERATING GOVERNANCE, AND THREAT REVIEW OF THE LAA UASI

As the second largest city in the country, Los Angeles was one of the seven initial cities to receive UASI grant money in the aftermath of the 9/11 attacks.⁸¹ The background section of this chapter describes the origin and evolution of the UASI program for Los Angeles. This chapter explores key events and milestones that have shaped its development over the years, offering a comprehensive individualized threat analysis that examines past and current threats to the LAA. It also describes the structure and organization of the program, including the role of key stakeholders and the decision-making processes that guide its operation. Finally, this chapter provides an overview of the funding mechanisms and regulatory frameworks that support the LAA UASI.

A. BACKGROUND

The LAA is unique compared to other UASI regions. First of all, its size and scope are unlike any other area. As described by Mayor Eric Garcetti, Los Angeles (LA)’s ideal geographic location positions it as “the western capital of the U.S., the eastern capital of the Pacific Rim, and the northern capital of Latin America.”⁸² Economically, the LA region has the “third largest metro economy after Tokyo and New York with 10 million residents, [and] fourteen major industry clusters including technology, aerospace, entertainment and tourism.”⁸³ All these industries are clearly defined by DHS’s *National Infrastructure*

⁸¹ Christopher Thornberg, Robert Kleinhenz, and Brian Vernderplas, *City of Los Angeles: A Comparative Analysis* (Los Angeles: Beacon Economics, 2019), <https://cao.lacity.org/debt/2019.06.13%20-%20City%20of%20Los%20Angeles%20-Comparative%20Analysis.pdf>.

⁸² Elson Trinidad, “Is L.A. a West Coast City? For Many, It’s the East. Or the North,” KCET, November 21, 2017, para. 1, <https://www.kcet.org/shows/lost-la/is-l-a-a-west-coast-city-for-many-its-the-east-or-the-north>.

⁸³ Jacqueline Rodriguez, *City of Los Angeles: Opportunity Zone Prospectus* (Los Angeles: Los Angeles Economic and Workforce Development Department, 2019), 15, https://ewddlacity.com/images/opportunityzones/LA-Opportunity-Zone-Prospectus_2019.pdf.

Protection Plan (NIPP) as critical infrastructure.⁸⁴ As described in the NIPP, these industries directly affect national supply chains, logistics backbones, and energy security.⁸⁵ When it comes to trade, the Port of Los Angeles is known as “the busiest port in the United States and the largest port complex in the Western Hemisphere. . . . The port of Los Angeles and Long Beach accounted for nearly one-third of exports from California in 2018.”⁸⁶ In fact, the Ports of Los Angeles and Long Beach combined handle approximately 40 percent of the nation’s imported and exported goods and the intermodal transportation system comprising rail, roadway, pipeline, ships, ports, tunnels, bridges, and air.⁸⁷ Additionally, LA boasts the nation’s busiest airspace with the large-category Los Angeles International Airport and five medium-category hub-sized airports in the LA UASI region.⁸⁸

In terms of critical infrastructure, LA’s area of responsibility (AOR) contains numerous assets in each of the 18 DHS sectors, including significant banking and finance, energy, postal, water, and energy. The LAA has also been uniquely dubbed the “entertainment capital of the world” and is home to celebrities to accommodate this industry. According to the Los Angeles County Economic Development Corporation, this moniker has been “earned over many decades of activity in motion picture, sound, and television production.”⁸⁹ The intricate relationship between population, geography, and

⁸⁴ Department of Homeland Security, *Critical Infrastructure Threat Information Sharing Framework: A Reference Guide for the Critical Infrastructure Community* (Washington, DC: Department of Homeland Security, 2016), 6, <https://www.cisa.gov/sites/default/files/publications/ci-threat-information-sharing-framework-508.pdf>.

⁸⁵ Department of Homeland Security, *National Infrastructure Protection Plan: Partnering to Enhance Protection and Resiliency* (Washington, DC: Department of Homeland Security, 2009), <https://www.cisa.gov/sites/default/files/publications/national-infrastructure-protection-plan-2009-508.pdf>.

⁸⁶ Thornberg, Kleinhenz, and Vernderplas, *Comparative Analysis*, 11.

⁸⁷ “A Record Year for America’s Ports and a Look to the Year Ahead,” *National Economic Council Briefing Room* (blog), January 20, 2022, <https://www.whitehouse.gov/nec/briefing-room/2022/01/20/a-record-year-for-americas-ports-and-a-look-to-the-year-ahead/>.

⁸⁸ “Part 139 Airport Certification Status List (ACSL),” Federal Aviation Administration, February 23, 2023, https://www.faa.gov/airports/airport_safety/part139_cert/part_139_airport_certification_status_list.

⁸⁹ Robert Kleinhenz et al., *The Entertainment Industry and the Los Angeles County Economy* (Los Angeles: Los Angeles County Economic Development Corporation, 2012), 1, <https://laedc.org/wp-content/uploads/2012/08/EntertainmentinLA.pdf>.

critical systems and their connection to national energy, transportation, and communications capabilities makes the LA AOR an attractive target.

The next issue that sets the LAA apart from others is the vast number of government entities involved. The LAA UASI encompasses three different agency types: fire; law enforcement; and others, including emergency management partners, public health agencies, disaster preparedness agencies, and prehospital emergency medical services. According to the Office of the City Administrative Officer, the cities included in the UASI grant framework include Alhambra, Beverly Hills, Burbank, Glendale, Hawthorne, Inglewood, Long Beach, Monterey Park, Pasadena, San Fernando, Santa Monica, South Pasadena, Torrance, and the County of Los Angeles.⁹⁰ Within the LA UASI area, there are 124 different law enforcement agencies and 29 separate fire departments.⁹¹

The LAA UASI threat environment comprises an array of criminal actors, organizations, and movements, including terrorists. As an international hub on the West Coast, LA is home to large populations of religious groups, each with its own political enemies. In terms of international terrorism, LA has shown itself a viable target. Recent evidence uncovered in the Pakistani safe house of former al-Qaeda leader Osama bin Laden, where he was killed, demonstrates al-Qaeda's continued desire to attack targets in the greater LA region.⁹² Previous attempts have included the interdicted 1999 "millennium bomber" plot—in which Ahmed Ressam was sent to detonate explosives at Los Angeles International Airport—and a plot by al-Qaeda's captured external operations manager,

⁹⁰ Richard Llewellyn, *Fiscal Year 2020 Urban Area Security Initiative Grant Award Acceptance* (Los Angeles: Office of the City Administrative Officer, 2021), https://clkrep.lacity.org/onlinedocs/2020/20-1156_rpt_cao_03-19-21.pdf.

⁹¹ "Police Departments in Los Angeles County, California," CountyOffice.org, accessed September 24, 2022, <https://www.countyoffice.org/ca-los-angeles-county-police-department/>.

⁹² Pierre Thomas and Richard Esposito, "Osama Bin Laden Raid: Al Qaeda 'Playbook' Revealed," ABC News, May 6, 2011, <https://abcnews.go.com/Blotter/osama-bin-laden-raid-al-qaeda-playbook-revealed/story?id=13544154>.

Khalid Sheikh Mohammed, to fly a commercial airliner into the tallest building in LA.⁹³ As reported by ABC News, al-Qaeda had originally planned “to use a fifth commercial jet [on 9/11] to bring down the 73-story Library Tower in Los Angeles . . . but Osama bin Laden believed an attack on both coasts was too ambitious.”⁹⁴ More recently, in 2019, a digitally altered image disseminated online depicted a man in uniform holding an ISIS flag and standing before a burning AON tower in downtown LA (see Figure 1).



Figure 1. Digitally Altered Image of an ISIS Fighter before a Burning LA Tower.⁹⁵

⁹³ Mark S. Hamm and Cécile Van de Voorde, “Crimes Committed by Terrorist Groups: Theory, Research, and Prevention,” *Trends in Organized Crime* 9, no. 2 (December 2005): 4, <https://doi.org/10.1007/s12117-005-1023-y>; Senate Select Committee on Intelligence, *Report of the Senate Select Committee on Intelligence, Committee Study of the Central Intelligence Agency’s Detention and Interrogation Program*, S. Report No. 113–288 (Washington, DC: U.S. Senate, 2014), 183, <https://www.intelligence.senate.gov/sites/default/files/publications/CRPT-113srpt288.pdf>.

⁹⁴ “Al Qaeda Tried to Outsource L.A. Skyscraper Terror Plot,” ABC News, February 9, 2006, para. 1, <https://abcnews.go.com/WNT/story?id=1600806&page=1#:~:text=%22Khalid%20Sheikh%20Mohammed%2C%20the%20mastermind,West%20Coast%2C%22%20Bush%20said.>

⁹⁵ Source: Carlos Granda, “Terror Group’s Photo of LA Building Raising Security Concerns,” February 17, 2019, ABC News San Francisco, video, 1:40, <https://abc7news.com/aon-tower-threat-isis-los-angeles-terrorist-video/5142806/>.

Homegrown violent extremists (HVEs) also view the LA AOR as a target, as evidenced by notable HVE attacks or plots that have recently become public knowledge. In 2005, sympathetic terror members formed a cell from within the California state prison. Dubbed Jam'iyyat Ul-Islam Is-Saheeh, the group considered a series of attacks in the LAA against a range of targets, including military recruitment centers, Jewish facilities, and the Los Angeles International Airport. This plot was disrupted with the arrest of some members who sought to raise funds by robbing area gas stations.⁹⁶

B. OVERVIEW AND ANALYSIS OF GOVERNANCE

As determined by federal statutes for the UASI grant program, each area is summoned to create governance. In LA, this process goes through the City of Los Angeles's Mayor's Office of Public Safety. Its mission is to oversee initiatives, programs, grants, and departments focused on keeping residents safe.⁹⁷ The governance structure of the LAA UASI starts with the approval authority, which includes 11 executive-level staff members with equal voting rights in determining projects and investments. These members include the following:

1. City of Los Angeles, Police Chief;
2. City of Los Angeles, Fire Chief;
3. City of Los Angeles, Los Angeles World Airport (LAWA) Police Chief;
4. City of Los Angeles, Port Police Chief;
5. City of Long Beach, Police Chief;
6. City of Long Beach, Director of Disaster Preparedness and Emergency Communications;
7. County of Los Angeles, Sheriff;
8. County of Los Angeles, Fire Chief;

⁹⁶ Mark S. Hamm, "Prisoner Radicalization: Assessing the Threat in U.S. Correctional Institutions," *National Institute of Justice Journal*, no. 261 (2008): 16, <https://www.ojp.gov/pdffiles1/nij/224083.pdf>.

⁹⁷ Llewellyn, *Fiscal Year 2020 Urban Area Security Initiative Grant Award Acceptance*, 4–5.

9. County of Los Angeles, Director of Health Services;
10. Independent agency, Los Angeles Area Police Chief's Association (LAAPCA) President; and
11. Independent agency, Los Angeles Area Fire Chief's Association (LAAFCA) President.⁹⁸

For committee and new idea creation, the first level below the approval authority is the “working group,” consisting of 18 members. As detailed by the Office of the City Administrative Officer, the LAA UASI's working group includes the following members:

- City of Los Angeles:
- Police: Los Angeles Police Department, two members;
- Fire: Los Angeles City Fire Department (LAFD), two members;
- Airport: LAWA PD, one member;
- Port: Port of Los Angeles PD, one member;
- Utilities: Los Angeles Department of Water and Power, one member; and
- Emergency management: LA Emergency Management Department (EMD), one member.
- Long Beach:
- Police: Long Beach Police Department, one member;
- Fire: Long Beach Fire Department, one member;

⁹⁸ Richard Llewellyn, *Fiscal Year 2019 Urban Area Security Initiative Grant Application* (Los Angeles: Office of the City Administrative Officer, 2019), https://clkrep.lacity.org/online/docs/2019/19-0695_rpt_CAO_09-26-2019.pdf. Note that this list comprises titles as opposed to named positions. This structure allows for members to come and go as new commands are implemented with the retirement of outgoing members.

- Emergency management: Long Beach (LB) Health Department, one member; and
- Port: Port of Long Beach, one member.
- County of Los Angeles:
- Police: Los Angeles Sheriff’s Department, one member;
- Fire: LA County Fire Department, one member;
- Public health: LA County Health Department, one member; and
- Emergency management: LA County Office of Emergency Management, one member.
- Independent:
- Police: LAAPCA, one member; and
- Fire: LAAFCA, one member.⁹⁹

Of the governance models described earlier, the LAA UASI works within a competency board model of governance. In this style of governance, theoretically, the bylaws become the driving force in decision-making—a good model because most public service agencies have high turnover in their executive staff. Ideally, if members rotate out, the outcome should not change. Putting such a model into practice is often different, so this work aims to find some of the shortcomings and solutions with this governance model.

A few challenges immediately stand out in the LAA UASI’s style of governance. First, because there is executive staff turnover, the board may experience a lack of institutional knowledge. The lack of process knowledge, particularly concerning the mission of the federal grants, becomes obvious in many decision-making processes, evident with the frequent changes in leadership and lack of continuity in the

⁹⁹ Llewellyn, Attachment C.

implementation of policies and procedures. Additionally, there may be issues with the coordination and communication among the various agencies and organizations involved in the LAA UASI, leading to confusion and inefficiency in decision-making and action.

A second challenge arises annually, when the board chooses a new president. Since the board comprises all fire chiefs or police chiefs in the case of law enforcement, they make decisions for potentially non-UASI cities and towns, leading to potential resistance from communities that do not agree with the UASI's decisions and policies. Cabrey, Haughey, and Cooke-Davies explain in their work that stakeholder buy-in is a crucial element. They assert that successful implementation “involves preparing your organization for transformation, ensuring stakeholder buy-in, and engaging executive sponsors to champion and support the change before, during, and after its implementation.”¹⁰⁰ Consistent with this observation, a lack of buy-in from non-UASI municipalities will further exacerbate issues of coordination and communication. This vulnerability stems from two main issues: lack of continuity of leadership and direction from the UASI and intermixing of granting sources.

In the LA region, the governance method for UASI boards delineates three disciplines—law enforcement, fire agencies, and emergency management—related departments. Governance of UASI funding for fire and police is driven by their respective commissions—the LAAFCA and the LAAPCA. Nevertheless, there is not typically a large unifying, goal-oriented method to grant spending within these disciplines. One potential solution to this issue involves creating a unified oversight committee that brings together representatives from all three disciplines to oversee the distribution of the UASI grant funds with a collective mission set of ideas. This committee could be responsible for setting clear, measurable goals and ensuring that they align with the needs of the area as well as the overall mission of the UASI program. Additionally, this committee could be responsible for monitoring the progress of these programs, as well as making adjustments as needed. A final recommendation would be separation of interrelated granting sources so there is

¹⁰⁰ Tricia Cabrey, Amy Haughey, and Terry Cooke-Davies, *Enabling Organizational Change Management Strategic Initiatives* (Newtown Square, PA: Project Management Institute, 2014), 2, <https://training.procept.com/library/pmi-changemgmt-en.pdf>.

complete transparency to the end product. This type of oversight could be essential in ensuring that grant funds are used in the most effective and efficient way possible.

C. CONCLUSION

This chapter has outlined relevant data and research to provide an objective assessment of the LAA UASI program and identified areas for improvement. Overall, this chapter has provided a comprehensive examination, illuminating the significance of the LAA as a critical component of national security and emergency preparedness. With its unique, complex, and strategically important location, the LAA will continue to present an attractive target for violent criminal actors and organizations. Given its integrated targets, DHS has determined that the LAA has a great need for security. A successful attack on any part of its complex ecosystem could severely disrupt the economy, civility, and cohesiveness of the entire country.

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IV. FRAMEWORK TO INCREASE COOPERATION AND UNITY FOR THE LAA UASI

The LAA UASI differs greatly from other large UASI areas. Nonetheless, the solutions presented in this chapter would work to varying degrees as a framework for unity and collaboration among area partners. The challenge of creating collaborative governance, implementing technical solutions that bridge intelligence gaps, and establishing mission-based training could unify different response agencies and assist in building unified partnerships.

This chapter examines collaborative solutions to the current challenges facing the LAA UASI. The challenge of creating preventive solutions to disaster management, whether natural or human made, is best achieved with strong, sound, and collaborative local-level leadership. Even as disaster planning and response within the United States has become more complicated, cooperation across agencies is the heart of homeland security.

After discussing governance solutions, this chapter looks at two technological solutions. If executive leadership, either on the scene of emergencies or in planning scenarios, could see the real-time capabilities of neighboring or regional agencies, then it could request whatever UASI asset it needed. The research shows that into the future and as threats evolve, a COP will promote safety in the homeland security mission. Finally, this chapter discusses training needs and addresses some commonsense remedies to solve these challenges.

A. GOVERNANCE

This section focuses on what governance is and how good governance is achieved. Public policy has long worked to achieve successful program administration—but experienced a wide variety of successes, failures, and mediocracy. Hill and Lynn ask in their 2004 article for the *Journal of Policy Analysis and Management*, “Do the designs of policies and programs affect their performance? Does management matter, and if so, how? Are particular organizational structures better than others for accomplishing certain goals

and, if so, for whom, when, and where?”¹⁰¹ These questions and more are involved in determining a proper course of action for UASI governance.

This section describes some of the outcomes of good governance. First, appropriate governance gives legitimacy and voice. Legitimacy requires a consensus within the voice of the board or populous. Additionally, all agents are freely considered with equal participation. Second, good governance gives clear direction and purpose. This direction is often given as a strategic vision or plan. It contains a roadmap to where the agency is going and how it is getting there and understands the complexities within the organization. The third principle is effective performance, which entails the board or government structure’s ability to respond effectively to the organization while best utilizing resources. The next tenets are accountability and transparency. As evidenced by the current political system, the government finds these principles increasingly important in modern society. A good governance model must give outward demonstrations of positive impacts and leadership. Finally, good governance is fair and ethical in its behavior. Appropriate governance enforces legal frameworks while providing opportunities to foster sustainability. It allows inclusivity and equal participation.¹⁰²

Governance models have changed over time and depend on their goals within the frameworks, periods, or government structures in which they are created. Since no “one decision-making” model exists, governments, firms, associations, and public service agencies have used varying strategies to steer society or guide a populous. From the top-down hierarchical structure to citizen or shareholder power bases, governance takes on many different shapes.¹⁰³ This area of the chapter uses concrete examples to examine some of the models in practice today.

The “traditional model,” also known as the “advisory board” style, is the oldest governance model. Developed for corporate structuring in the 1700s, this model has been

¹⁰¹ Carolyn J. Hill and Laurence E. Lynn, “Governance and Public Management, an Introduction,” *Journal of Policy Analysis and Management* 23, no. 1 (Winter 2004): 3–11, <https://www.jstor.org/stable/3326187>.

¹⁰² Saito, “Is Good Governance a Necessary Precursor to Peace?”

¹⁰³ Michalski, Miller, and Stevens, “Governance in the 21st Century.”

passed down over the years to charitable organizations, government structures, and corporate governing. The foundational concept is that the board is the legal ownership entity. In fact, the board always speaks as a whole, never individually.¹⁰⁴ The board may often have an advisory council; however, these members usually have little direct decision-making power.

The traditional model of governance has lasted the test of time because of the flexibility built into the structure.¹⁰⁵ For example, a more modern version of the traditional style incorporates a chief executive officer (CEO), and when technical information is needed, there is often room for an advisory board. The CEO may direct the board of directors or take the place of the board altogether. However, more often than not, the board is a governing body above the CEO. In this style, the board delegates the responsibilities of the CEO, management, and board committees. Advisory boards can provide the organization with professional advice, skills, and talents.¹⁰⁶ The traditional style has many features that can help it stay relevant in many complex situations.

The second model is the competency board model, which is interested in the knowledge and skills of the board. It addresses the board as a team, seeking to improve the team's performance over time continuously.¹⁰⁷ Furthermore, the competency model helps to develop the board's knowledge and skills as it adheres to the organization's bylaws—because the “bylaws do the work of outlining practices and strategies.”¹⁰⁸ The concept of having competency-based governance is relatively new but does make logical sense. For example, a healthcare company with trustees or board members unfamiliar with specific job policies might have difficulty understanding the full ramifications of its governance

¹⁰⁴ Doug Macnamara, “Models of Corporate/Board Governance,” *Leadership Acumen*, no. 21 (April/May 2005), <http://www.banffexeclead.com/Newsletter04/PDF/Leadership%20Acumen%2021%20V2%20Models%20of%20Corporate%20and%20Board%20Governance.pdf>.

¹⁰⁵ Jeremy Barlow, “Board Governance Models: A Comprehensive List,” *Board Effect*, April 19, 2016, <https://www.boardeffect.com/blog/board-governance-models-a-comprehensive-list/>.

¹⁰⁶ Macnamara, “Models of Corporate/Board Governance.”

¹⁰⁷ Macnamara, 4.

¹⁰⁸ Barlow, “Board Governance Models.”

decisions. Cornwall and Totten explain in their report for the American Hospital Association that competency-based governance will

- Ensure that we have broader and deeper expertise on the board to make better governance decisions . . .
- Focus new recruiting on competencies we need for the future, to enrich the board . . . [and]
- Guide us in helping each other to develop and refine our respective capabilities and competencies.¹⁰⁹

An example of such a competency board is the Port of Los Angeles, a department of the City of Los Angeles, also known as the Harbor Department. It is governed by the LA Board of Harbor Commissioners, a panel appointed by the mayor of Los Angeles. Since the city's taxes do not support the port, the commissioners operate as landlords. The port is an "ordinance-created commission" but relies on the competencies of the board members. Their decisions represent a united voice, but their overall governing principle is to allow the bylaws to outline their practices and strategies. This is an essential tenet of governance when leadership rotates out due to promotion or retirement. Using a title as a placeholder allows some consistency in a dynamic world.

Another governance style is the consensus or process model. This style gives all members equal votes and equal responsibility. It recognizes that board members have different areas of expertise, knowledge, and wisdom. The model allows everyone to speak about all sides and listen respectfully. An usual outcome of this model is that it slows down the process. For example, constituent representatives on the board must first receive authorization from their agency or constituency before an agreement can be reached, so issues can become easily sidetracked.

An example of this consensus style is a city or county EOC. This body has representatives from agencies within the affected region, but these members do not usually have the authority to make decisions solely for their agency. As agency representatives, they can get the command staff in touch with some of the sensitive inner workings of

¹⁰⁹ Deborah Cornwall and Mary K. Totten, *Competency-Based Governance Enters the Health Care Boardroom* (Chicago: American Hospital Association's Care for Healthcare Governance, 2010), 9, <https://trustees.aha.org/sites/default/files/trustees/10-competency-based-governance.pdf>.

individual departments, sectors, or agencies within the response network. These members can give industry-specific information in a collaborative effort to remediate or manage a large-scale incident. However, when it comes time to effecting a decision, the representative typically must request the operation center's approval through the chain of command.

The fourth model is the cortex model, developed by John Por of Toronto. The cortex model focuses on the organization's value to the community. The board defines the standards, expectations, and performance outcomes according to the organization's aspiration. According to Macnamara, "The Board's main job under this model is to clarify and set the [outcomes'] measures of success. To do this, the Board must truly seek to understand the value their organization provides to the community. Finally, the Board creates an Accountability Framework around the . . . measures, and identifies who is responsible for leading/taking action in each area—Board, CEO or Staff."¹¹⁰ The cortex model aims to give back to the community and is therefore often used in nonprofit-style governance boards.

The final model, the Carver or policy board model, was popularized by John Carver over the past 20 years. In his book *Boards That Make a Difference*, Carver states that the board has regular meetings with the CEO, and there is a high level of trust and confidence between both. Other boards may be created, such as boards to work on fundraising or policies. The board grants most of the authority to the CEO, who has complete control over the organization and its workings. The board then becomes second in command.

This model focuses on the "ends" of the organization's purpose. The two fundamental concerns are (1) defining the organization's ends—what it strives to achieve—and (2) creating policies by which the board must abide in its pursuit of the ends. A board's role is to create policies to guide management in its operational work. The board sets limits, and as long as the CEO is within these limits, the CEO has significant freedom to decide how, when, and where to do things—the means of getting to the ends. In this method, boards or committees have chairs with the same freedom to achieve the goals.

¹¹⁰ Macnamara, "Models of Corporate/Board Governance," 3.

B. TECHNOLOGY

This section examines collaborative solutions using new technologies. It first looks at an approach to build real-time asset management capabilities designed to take varying data inputs and build analytical models of what is happening across the region. If executive leadership, either on the scene of emergencies or in planning scenarios, can see the real-time capabilities of neighboring or regional agencies, it could request whatever UASI asset it needed. The research shows that into the future and as threats evolve, a COP will help bring about safety in the homeland security mission.

1. Asset Management

Often referred to as a tool to give separate or differing agencies a COP, asset management helps to achieve that collaborative mission.¹¹¹ This subsection presents an overview of asset management concepts, successful asset management practices used in other applications, and the overall optimized use of asset management to create a decision analysis approach for purchasing, maintenance, and capability needs within the LAA.

According to Hastings, asset management is “a systematic approach to managing physical assets from concept to disposal.”¹¹² He maintains that its “general principles . . . are to make them accessible to a wide audience.”¹¹³ Asset management tracks available resources and achieves greater effectiveness in reaching organizational objectives. Furthermore, a failure to track assets appropriately guarantees that significant losses will follow.¹¹⁴ For these reasons, an asset management system is vital for any grant funding.

Implementing an asset management system requires an embedded detection device for wireless monitoring. This system starts with a radio frequency identification (RFID)

¹¹¹ Department of Homeland Security, System Assessment and Validation for Emergency Responders Program, “Common Operating Picture for Emergency Responders.”

¹¹² Hastings, *Physical Asset Management*, xxxi.

¹¹³ Hastings, 3.

¹¹⁴ Peterson, *Accounting for Fixed Assets*.

tag, which uses electromagnetic fields to identify and track items.¹¹⁵ Three components enable tracking: the antenna, the transponder, and the RFID tag. This asset management tracking system instantly updates collective intelligence regarding the location and availability of items within the platform.

Regarding the costs involved, agencies or stakeholders implementing an asset management system will spend heavily up front, but the savings from averting duplication, losses, and theft far outweigh these costs. Aside from the monetary savings, the most significant benefit is the “real-time information” and “situational awareness” that provide immediate tactical coordination and predictive information analysis.¹¹⁶ Suppose the software could track assets in real time. In that case, if a regional asset is needed for a large-scale incident, predictive software could assist managers in requesting a particular item. Since the LA region is a complex area of 29 fire agencies and 124 police departments, a predictive real-time solution is well overdue.

The asset management system succeeds in many different situations and domains. For example, the electrical grid represents a COP built on an asset management program. Mihai-Alexandru Cristea, for the *Business Review* of Romania, writes that in electrical utility asset management, the system will “maintain and track the condition, performance, and maintenance of utility assets.”¹¹⁷ Electrical companies need this system to reflect the current grid supply and predict future needs. Keeping national energy needs streamlined and operational depends on an accurate, instant asset management system. If the UASI funding framework followed that of the electrical grid, it might achieve greater continuity between agencies and less waste and duplication in grant funding.

¹¹⁵ Rittinan Chanpen, Kobkiat Saraubon, and Panurut Chinakul, “Asset Management System Using NFC and IoT Technologies,” in *Proceedings of the 2019 3rd International Conference on Software and e-Business* (New York: Association for Computing Machinery, 2019), 124–28, <https://doi.org/10.1145/3374549.3374558>.

¹¹⁶ Norquist, “Common Operating Picture and Planning Environment.”

¹¹⁷ Mihai-Alexandru Cristea, “How to Streamline Electric Utility Asset Management,” *Business Review* (Romania), April 28, 2022, <https://business-review.eu/energy/how-to-streamline-electric-utility-asset-management-230328>.

In fact, one of the most significant benefits of energy companies is their sharing of information, networks, and power. Power companies supply energy to a population with varying power demands, which require a platform of shared data. In California, for example, the California Independent Service Operator manages the flow of electricity across 80 percent of the state and a small part of Nevada. According to its website, “While utilities still own transmission assets, the Independent Service Operator (ISO) controls the routing of electrons, maximizing transmission system efficiency and generation resources, and supervising maintenance of the lines.”¹¹⁸ Since the ISO controls energy routing, it must possess two key data sets: real-time data on power demands and real-time data on power supplies. Since these values can change instantaneously, it is paramount for the management group to have these immediate analytics capabilities. If a model of this scale has been achieved for the power management, it can clearly be scaled for specialized homeland security needs.

Another benefit of asset management software is the opportunity for preventive maintenance schedules. One system, known as the computerized maintenance management system (CMMS), enables an organization to manage all sorts of maintenance activities.¹¹⁹ As described by Ashraf Labib in his book, CMMS is “vital for the coordination of all activities related to the availability, productivity, and maintainability of complex systems.”¹²⁰ He goes on to state that CMMS offers the following benefits: resource control, cost management, scheduling, integration, and fewer breakdowns. In the case of California energy, the California ISO is responsible for determining maintenance schedules for hundreds of thousands of electrical assets, all owned and operated by separate power companies. By verifying and controlling the accurate and urgent maintenance of assets, CMMS could reduce outages and ensure safety across multiple platforms and energy companies.

¹¹⁸ “Understanding the ISO,” California Independent System Operator, accessed December 5, 2022, <https://www.caiso.com/about/Pages/OurBusiness/Default.aspx>.

¹¹⁹ Ashraf Labib, “Computerised Maintenance Management Systems,” in *Complex System Maintenance Handbook*, Springer Series in Reliability Engineering (London: Springer, 2008), 4, https://doi.org/10.1007/978-1-84800-011-7_17.

¹²⁰ Labib.

The mission of homeland security detection, deterrence, and mitigation also requires a high volume of assets. When it comes to the state of California, FEMA’s coordinating office, the California Office of Emergency Services (Cal OES), has developed a standard equipment list to ensure hazmat programs meet minimum requirements of inventory items, which aligns with federal requirements. Such lists are extensive in the amount of equipment needed to comply with the standards. Cal OES’s *Standardized Hazardous Materials Equipment List* also allows for specific “typing” of resources.¹²¹ Many of the items contained in this document are consumables, meaning they have expiration dates. An asset management system could easily track these resources and ensure they are current and completely calibrated for a response.

Nonetheless, unlike the California ISO example, there is currently no method of tracking assets across the 29 departments in the LAA UASI. In other words, if one department wanted to know whether another had a particular capability or device, it would have to call a representative to ask. This thesis argues that the LAA UASI requires a new system that allows the entire region to view independent agency capabilities. Further, this capability would enhance regional coordination, increase transparency, which could later strengthen cooperation.

2. Common Operating Picture

As detailed in FEMA’s National Response Framework, a COP is “a continuously updated overview of an incident compiled throughout an incident’s life cycle from data shared between integrated systems for communication, information management, and intelligence and information sharing.”¹²² The importance of situational awareness at operations centers cannot be overstated. NIMS suggests that agencies develop COP for response to large-scale incidents and multiple-agency events.¹²³ In 2011, FEMA

¹²¹ California FIREScope, *Standardized Hazardous Materials Equipment List*, ICS-1120 (Riverside: California FIREScope, 2016), <https://firescope.caloes.ca.gov/ICS%20Documents/ICS-1120.pdf>.

¹²² Emergency Management Institute Glossary, s.v. “common operating picture,” accessed March 20, 2023, <https://emilms.fema.gov/is821/glossary.htm>.

¹²³ Department of Homeland Security, System Assessment and Validation for Emergency Responders Program, “Common Operating Picture for Emergency Responders.”

developed the NPG, which attests that “planning, public information and warning, and operational coordination are core capabilities common to all mission areas.”¹²⁴

One argument is that modern technology can be a collaborative solution to the age-old consequence management problem. There are data and research to support the claim that increased situational awareness created in building a COP is beneficial and, therefore, necessary for operational success.¹²⁵ While there are multiple platforms, and this research does not propose that one system is better than another, these systems are mandatory for successfully managing multi-agency incidents.

Large-scale incidents such as earthquakes, fires, floods, and terror attacks inundate the responsible agencies. No matter how large or redundant any response agency is, large-scale disasters demand mutual aid from neighboring cities, counties, and states. The first step of consequence management is knowing where to get specific assets for explicit missions within proximity. Second, one must know, once aid arrives to assist, who or what is tracking all these assets so they may be utilized seamlessly and equitably. In this aspect, technological innovations can help executive managers build collaboration in their management groups or incident command structures.

Robert E. Balfour offers one solution, developed at the state-of-the-art Morrelly Homeland Security Center, using proprietary software called fourDscape. Balfour’s group developed a system called Virtual Command Operations and Response Environments.¹²⁶ The three missions of this software include

- (1) integrating and managing a multitude of disparate data sources of all types (including live and static data feeds);
- (2) interoperability with numerous other vendors information systems . . .
- and

¹²⁴ Department of Homeland Security, *National Preparedness Goal*, 2.

¹²⁵ Danielsson, Alvinus, and Larsson, “Common Operating Picture to Situational Awareness,” 30.

¹²⁶ Robert E. Balfour, “Next Generation Emergency Management Common Operating Picture Software/Systems (COPSS),” in *Proceedings of the 2012 IEEE Long Island Systems, Applications and Technology Conference* (Piscataway, NJ: IEEE, 2012), 1–6, <https://doi.org/10.1109/LISAT.2012.6223101>.

(3) sharing and passing information and comprehensive, timely situational awareness between first responders at the incident site, incident commanders, and emergency managers and decision-makers at local, regional and national emergency operations centers across the country.¹²⁷

Of these critical features, the most important for emergency managers is the capability dubbed “shared situational awareness.”

Almost all COP software systems, as with Balfour’s fourDscope, can create a layered approach or architecture to the software. The layered architecture allows these types of platforms to integrate many different data sets from multiple sources, including resource analytics, mapping systems, large databases, all sizes of search engines or portals, and inside or outside network servers. These layers provide important information sets that can then be integrated into a large “picture” of the current state.

Another software option, ArcGIS by Esri, lends an integrative map-based geographical information system. This program automatically captures, stores, displays, queries, and analyzes geographical data. ArcGIS allows for the optimization of resource deployment using geospatial information and mapping overlay tools. In fact, in FEMA’s after-action reports from Hurricane Sandy, the fourth improvement for disaster response involved the use of GIS technology. The report called for a flexible platform that could “expand to provide a clearer Federal Common Operating Picture, including enhancements of real-time feeds, integration with other Situational Awareness products, and linking to the information of other Whole Community partners.”¹²⁸ Esri’s ArcGIS creates layers of customizable data, and layers are the building blocks of data—the logical grouping of similar objects. For example, roads could be layers; hospitals could be layers; or in real-time applications, the location of a police unit or incident could be a layer. Since these data layers are customizable in each case, the information is easily tailored to the end user’s demands or needs.

¹²⁷ Balfour, 1–2.

¹²⁸ Federal Emergency Management Agency, *Hurricane Sandy FEMA After-Action Report* (Washington, DC: Federal Emergency Management Agency, 2013), 9, <https://www.alnap.org/system/files/content/resource/files/main/sandy-fema-aar.pdf>.

One application of these concepts is now called “smart mapping.” According to Rehman et al., “Unlike conventional maps, smart maps extract live events (e.g., concert, competition, incident), online offers, and statistical analysis (e.g., dangerous areas) by encapsulating incoming semi- and unstructured data into structured generic packets.”¹²⁹ These packets, also known as data chunks, contain full or partial data sets (for example, statistical crime or accident data or other crowdsourced data). Additional data can be incorporated into smart maps, including geospatial features, clustering, or heat mapping. Clustering is a powerful way to visualize patterns among information sets when working with large data sets, for example, clusters of infection in a pandemic on a mapping platform. Another type of smart map is a heat map, a graphical representation of data where values are depicted by color in a map view. In sum, smart mapping provides a valuable ability to view data through multiple fields of mapping, primarily because data can take either two- or three-dimensional representations.

One global industry already leveraging COP software for everyday situational awareness is the oil and gas industry. Developed out of an inherent need to coordinate large-scale spill responses, oil and gas industries have developed fit-for-purpose views of an incident to enable lead responders, supporting agencies, and organizations to make effective, consistent, and rapid decisions. The best example is the enormous size and scope of a large spill in the Gulf of Mexico, as described by Davis and Fernandes in their video on Esri’s website.¹³⁰ Hundreds of agencies, thousands of responders, and multiple differentiating capabilities were required in the coordination of a single incident.

This system could easily be used in the homeland security space because the Esri platform provides the system, tools, and procedures to continuously collect, review, analyze, and disseminate authoritative incident-specific information to all appropriate

¹²⁹ Faizan Ur Rehman et al., “Towards Building Smart Maps from Heterogeneous Data Sources,” in *Proceedings of the Ninth International Conference on Advanced Geographic Information Systems, Applications, and Services*, ed. ClausPeter Rückemann et al. (International Academy, Research, and Industry Association, 2017), 9, https://www.researchgate.net/publication/316922290_Towards_Building_Smart_Maps_from_Heterogeneous_Data_Sources.

¹³⁰ Esri, “Common Operating Picture for Oil and Gas.”

stakeholders.¹³¹ Additionally, the platform makes authoritative content and up-to-date base maps available, including references and real-time data, to provide the context required for effective decision-making.

The time is right for the LAA to develop and utilize a software tool that creates an area-wide COP. It would enhance situational awareness in real time and enable leaders to make time-critical decisions backed by data and experience. Furthermore, the LA regional response network would be poised as an example for the rest of the country, as it once was, when it first successfully implemented NIMS during wildfire events.

3. Training

The next concept to facilitate the goal of creating collaborative approaches to the LAA's homeland security mission is the development of training focused on executive and upper-management personnel. The method must build on the development of a system that lends the overarching principles of regional security and acknowledges how that system may differ from or come into conflict—often perceived conflict—with the mission of a home agency.

a. Executive-Level Training on the Overarching Goals of the Grant Process

Chapter III explained the UASI's governance hierarchy in LA, describing the process for funding approval, which starts with the UASI's working group and proceeds to the approval authority, and the group's members. However, the chapter did not discuss the knowledge requirements placed on these board members. No official training is given to these executive leaders; instead, they are conferred power by their being heads of their departments and nothing else. This is not to say that these executive leaders do not understand the grant process or mission. Many of these executives possess extensive knowledge and experience in the grant world. Nevertheless, there is no requirement for this understanding. In the case of a new executive leader with little official knowledge of grant

¹³¹ Esri.

processes and missions, there could be a gap in understanding the agency and the grant methodology.

One might argue that the authority given to the approved members does not require them to understand the entire grant management process. This point is valid because the approval authority ends after the board awards monies. In fact, when it comes to the LAA or LB Area UASI, the City of Los Angeles is the grant oversight manager. The City of Los Angeles's Mayor's Office of Public Safety employs grant administrators and managers who do understand the grant process and demonstrate a robust ability to support the mission areas of national preparedness. These grant managers are the ones who collaborate between city agencies, different levels of government, and multiple jurisdictions to accomplish the activities related to planning, equipment, training, and exercises.

There is, however, a gap in training for which this research offers rational solutions. With all the people working hard to administer the UASI grant in LA and LB, the only requirement for a new fire chief on the authority board, for example, is a copy of the *Homeland Security Handbook*.¹³² According to DHS, the handbook tool kit outlines four main sections: "a background on . . . how the tool kit can be used, State Policy Maker Dissemination Plan Guidance, Sample agendas . . . and talking points which can be used in training and briefings, and a compilation of frequently asked questions regarding the purpose of the handbook."¹³³ Other than this handbook, there is no formal guidance or training given to the administrators of the UASI grants.

One immediate remedy to the potential knowledge gap is creating a mission-guided training program. Training courses must be developed for those charged with important decisions about funding homeland security programs. Stakeholders who should weigh in on the training include federal agencies, including FEMA and DHS; state resources, including Cal OES and the Office of the Governor of California; and city-level agencies, such as the local grant authority in the Mayor's Office of Public Safety and all UASI

¹³² Jack Pinkowski, ed., *Homeland Security Handbook*, Public Administration and Public Policy/139 (Boca Raton: CRC Press, 2008).

¹³³ Tracey Trautman et al., "Providing Program Management Support in Your State" (presentation, SLGCP Regional Conference, August 16–17, 2005), <https://www.hsdl.org/c/view?docid=775263>.

participating cities, including the City of Los Angeles, the County of Los Angeles, Pasadena, Glendale, Burbank, South Pasadena, Alhambra, Monterey Park, Long Beach, Torrance, Culver City, Santa Monica, San Fernando, El Segundo, and Beverly Hills.

b. Framework Issues

Implementing this type of training might pose some challenges—both cultural and political. Culturally, many executives who are long-term seat members might oppose being told or reminded of their mission or, even worse, a change in the mission. After all, there is often a tie to an old way of doing things, and some might perceive new training to be unnecessary. For this reason, such members should be sought after for their advice in the creation and implementation of training. The buy-in of these profoundly entrenched members will be an early target of messaging.

Also, because money flows through the Los Angeles Mayor’s Office, there could be political implications for strengthening safety throughout the LA region. If the push for limiting spending to safety or security is a big topic, it may be politically expedient to withhold federal funding. For this reason, this policy intends to leverage political forces early to ensure they understand the importance of this program outside the boundaries of routine policing. As political figures and their staff begin to understand the UASI grant, they will be on board early to stem any negative impacts that their lack of endorsement could entail.

C. CONCLUSION

This chapter has covered three pillars for strengthening the deployment of UASI funding in the LA region. The first pillar is to analyze the governance structure and give solutions to the impediments encountered. The second pillar comprises technological upgrades to foster a cooperative approach to multi-agency operations in a region with multiple mission sets. The two technical upgrades include asset management software and COP software, which this chapter argues will assist in bringing the region under the same operational management vision for homeland security. Finally, this chapter described a training program that is much more robust than that of the past. It described the needs and

the process, which in the end will unite those participating in executive-level management through a mission-focused leadership program.

V. FOUR ACTIONS FRAMEWORK FOR UASI

The next phase of the thesis models these proposals and suggestions through a framework that measures whether they will work, specifically in the LAA. This research uses the four actions framework, also known as the blue ocean strategy.¹³⁴ This method uses four questions to frame these different ideas regarding UASI funding elements. This chapter examines two distinct reasons for creating new “markets.”

The first is that UASI guidance calls for collaboration among local, state, and federal public health and other homeland security agencies.¹³⁵ Culturally, many of these agencies and their leadership often have a mindset of not reinventing the metaphoric wheel. Therefore, they seek existing products or services that can be adapted to their needs. Often, however, repackaging another model proves unwise for different agencies. In her article for the journal *Phi Delta Kappan*, Laura Thomas asks, “What if someone else’s wheel just won’t fit on our cart?”¹³⁶ The reality, she argues, is that much of what makes one program successful is built into the unique process of its creation. Therefore, the increased “market value” proposed in thesis lies in the process of creating individual programs that work in unique areas. The process, then, creates collaboration and human connections that solve individual problems.

One glaring example of ill-fitting models is embodied in public safety agencies’ process for placing people in grant funding positions. In the LAFD, newly promoted captains or chief officers may be asked by their superiors to fill a vacancy in a special duty assignment. For such positions, the personnel withdraw from their field positions for a time to learn the nuances of the grant world. The special position is typically a two-year commitment, so as soon as a member becomes semi-proficient in the granting specialties,

¹³⁴ Kim and Mauborgne, *Blue Ocean Strategy*.

¹³⁵ Jenkins, *FEMA Lacks Measures to Assess Regional Collaboration Efforts*.

¹³⁶ Laura Thomas, “In Praise of Reinventing the Wheel,” *Phi Delta Kappan* (April 2008): 612, <https://www.antioch.edu/wp-content/uploads/2017/01/wheel.pdf>.

another member must learn the system all over again. This author does not argue that this arrangement is inherently bad policy, but it does create the need for succession planning to replace networks of success. The new bodies cannot merely occupy the former members' wheelhouse; they must start from scratch building their own innovative solutions.

The second reason for creating new markets is that new threats or challenges require innovative solutions. In these cases, new products or services may need to be developed from scratch to address the specific needs of the public safety, public health, or homeland security sector. The COVID-19 pandemic illustrates how new threats create new markets. A short list of new markets created by the pandemic include personal protective equipment, hand sanitizers, pharmaceutical innovations of vaccines and therapeutics, at-home testing kits, the advent of the Zoom meeting, increased online activities, public health heat-mapping programs, QR code menus, and many more.¹³⁷ The main point here is that businesses and agencies that rapidly pivoted or adapted to new challenges built sustainable markets for innovative applications in the changing marketplace.

This chapter uses the four actions framework to look at the current state of the LAA UASI grant project to analyze its effectiveness against the blue ocean strategy. The end goal is to create a “new value curve,” which Kim and Mauborgne believe demonstrates a new market space for the consumer (or public). Figure 2 depicts how the framework can be referenced as a tool for thinking in a new way.¹³⁸

¹³⁷ OECD Development Centre, *Business Insights on Emerging Markets 2021* (Paris: OECD Development Centre, 2021), <https://www.oecd.org/dev/Business-Insights-Emerging-Markets-2021.pdf>.

¹³⁸ Kim and Mauborgne, *Blue Ocean Strategy*, 93.

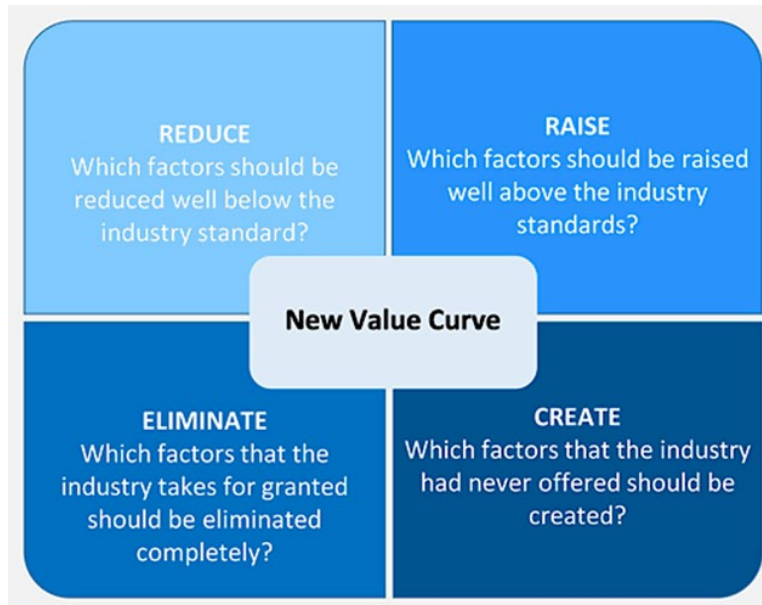


Figure 2. Four Actions Framework.¹³⁹

The goal of this analysis is to create cooperative strategies aligned with the blue ocean framework. This thesis considered all factors that might make the LAA UASI system run better and then targeted three specific areas: governance, technology, and training.

A. THE FOUR ACTIONS FRAMEWORK APPLIED TO THE LAA UASI

To create a new value curve, the LAA UASI must build on the idea of providing the best homeland security opportunities for the entire region. Based on the four actions framework, the LAA UASI has some definite challenges to address. For example, building a more cooperative framework requires eliminating distrust, finger-pointing, and hoarding of resources. The other end of the spectrum involves creating innovative ways to increase value, as described in earlier chapters. As shown in Table 3, by creating new advisory boards, technologically advanced implementations, and collaborative networks, the LAA can find a way to a collective future. The four actions framework provides a structure for creating new market spaces and value for customers. In the context of the LAA UASI, this framework identifies opportunities—and challenges to overcome—for improving

¹³⁹ Adapted from Kim and Mauborgne.

homeland security in the entire region. The following subsections explain the methodology and describe some solutions as evidenced by best practices in other disciplines.

Table 3. Four Actions Framework Applied to the LAA UASI

REDUCE	RAISE
• Spending costs • Wasted overlapping time • Duplicated capabilities • Duplicated training • Time wasted on concurrent planning	• Collaborative process and attitudes • Mutual aid/mutual agreements • Interoperability • Awareness of partner agencies' capabilities • Interagency cohesion and communication • Regional training approaches • Knowledge of key programs
ELIMINATE	CREATE
• Apathy or selfishness • Distrust or disunity • Wasted resources • Hoarding of key resources • Finger-pointing • Blaming for a lack of awareness	• Advisory board(s) • Technological enhancements • Asset management • COP • Regional approaches to security • Collaborative networks • Training for executive board members

Note. Purple = governance; Green = technology; and Blue = training.

1. The Negatives: Reduce and Eliminate

The first two questions are negatives: “Which issues should be eliminated and reduced?” Kim and Mauborgne describe the upper left frame as a reduction. This thesis has analyzed the items/assets and actions/training that are needed but must be obtained more innovatively. For example, regarding spending, the UASI grant is intended to allocate money; however, saving money is also of significant value. Therefore, if costs could be

reduced, then the net benefit would be increased funding for other important action items that might have been unavailable without the net savings.

Another example of reduction can be described within the training segment. There are often necessary or required training courses within first responder disciplines. If multiple jurisdictions are putting on the same class, it might be more cooperative to have multiple jurisdictions organize the training together. An even more innovative solution might be to combine efforts within the UASI agencies and create a unified approach to these required training needs. This method would eliminate waste and reduce overall costs. Agencies that were once pitted against one another would build a shared commitment to training needs throughout the region and then work together to develop and deliver training programs that met the needs of all agencies involved. This would not only reduce costs and increase efficiency but also lead to more consistent, practical training across the region. Additionally, by pooling resources and expertise, the UASI agencies would be better equipped to offer advanced specialized training courses, resulting in more highly trained and capable responders. This example of reduction through collaboration within the training segment is just one of the many ways that the four actions framework can be applied to create a new value curve for the region and enhance the overall effectiveness of homeland security efforts.

The next frame asks, “Which factors should be eliminated?” Within the bucket of monetary concerns, there is a considerable need to eliminate waste. While this chapter does not suggest eliminating spending, it refers to best waste-elimination practices. Often because of an overall lack of collaboration, resources go unused because system managers are unaware of their assets. Without a standard asset management program, there is inherent waste in many UASI programs. Managers often purchase duplicate items simply because they do not know what they have. A related issue is the distrust that perceived hoarding of assets, duplication of capabilities, or monetary modification creates. While often a perception-related issue, any distrust or disunity creates a lack of collaboration and cooperation and, therefore, must be eliminated.

Another factor that should be eliminated is duplicated efforts across different agencies. This is often the lack of communication among agencies, which leads to multiple

agencies working on the same problem without realizing it. This dynamic results in wasted resources and leads to confusion and inefficiency. To eliminate this problem, regular meetings and communication channels should be established among the agencies to ensure everyone knows what others are working on. This can be done through the creation of a shared information management system, which allows all agencies to access and update information about their activities and resources.

A final bucket to consider eliminating is the lack of standardization among UASI agencies. This problem can be eliminated by establishing a set of standard operating procedures and guidelines for all UASI agencies to follow. These procedures and guidelines will not only increase efficiency but also ensure that all agencies are working in the same way, which will make it easier to work together in times of crisis.

Some other things that must be eliminated include apathy, hoarding of resources, and finger-pointing when issues arise. These non-collaborative actions become detrimental to the success of any mission. Overall, the elimination of wasted resources, distrust, duplication of efforts, and a lack of standardization are all critical factors that must be addressed to create a new value curve within the LAA UASI. By eliminating these factors, the UASI agencies can work more effectively together, which will lead to a more secure and resilient region.

2. The Positives: Increase and Create

This subsection tackles the positive change categories, asking the question “Which areas need raising and creation?” The raise category involves things that have been done well and that the LAA UASI should consider increasing in the process. One of the leading programs of the UASI grant is to improve capabilities within the homeland security space. To that end, training is one of the key methods. This thesis suggests increasing training within a regional approach. The increase in interagency training would net improved interagency cohesion, more collaborative processes, and more positive attitudes. Training is the main category already showing success, so it should be further developed. This thesis has demonstrated the need to increase training for executives who become part of the authority board making critical decisions for the region. Training enhancements can also

be made for individuals and organizations within the homeland security space to increase proficiency in their roles and improve collaboration.

The raise category also requires a higher level of interoperability. As detailed in *The 9/11 Commission Report*, many of the responding agencies lacked the ability to communicate with one another.¹⁴⁰ This lack of interoperable communications could be reduced as agencies partner with one another in a collaborative training environment. Finally, different agencies would gain a more accurate picture of what other partnering agencies are capable of and, maybe more importantly, what they are not capable of.

Another part of the raise category is looking at areas where first responders can prepare their communities for large-scale disasters. FEMA defines a *disaster* as “an occurrence of a natural catastrophe, technological accident, or human-caused event that resulted in severe property damage, death, and/or multiple injuries. . . . A large scale disaster is one that exceeds the response capability of the local jurisdiction and requires State, and potentially Federal, involvement.”¹⁴¹ The most important part of the definition is that the local response capabilities are exceeded or overrun. Therefore, citizens will be on their own to manage individual issues. For example, California’s messaging for earthquake resilience asks people to be prepared to support themselves for at least 72 hours.¹⁴² For these reasons, the UASI must raise efforts to help its citizens enhance their readiness for disasters, such as shown with the Community Emergency Response Team program in LA.¹⁴³ The LAFD maintains constant community engagement to create a force-multiplier with the CERT program. The understanding is that in large-scale disasters,

¹⁴⁰ National Commission on Terrorist Attacks upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks upon the United States* (Washington, DC: Government Printing Office, 2004), 293, <https://www.govinfo.gov/content/pkg/GPO-911REPORT/pdf/GPO-911REPORT.pdf>.

¹⁴¹ Federal Emergency Management Agency, “Glossary of Terms,” in *Guide for All-Hazard Emergency Operations Planning*, SLG 101 (Washington, DC: Federal Emergency Management Agency, 1996), GLO-2, <https://www.fema.gov/pdf/plan/slg101.pdf>.

¹⁴² “How to Make an Earthquake Emergency Kit,” *California Earthquake Authority* (blog), October 30, 2019, <https://www.earthquakeauthority.com/Blog/2019/How-to-Make-an-Earthquake-Emergency-Kit>.

¹⁴³ Stacy E. Gerlich, “How LAFD CERT May Be Understood as a Smart Practice: How It Is Pioneering a Transition to Whole Community CERT and How It Can Serve as the Template for CERT Programs Nationally” (master’s thesis, Naval Postgraduate School, 2014), <https://calhoun.nps.edu/handle/10945/42633>.

first responder assistance will be overwhelmed, so citizens will most likely need to help their neighbors.

The final section of the four actions framework involves creation, which for the LAA UASI involves innovations to benefit the entire region—and even others. First, creating new advisory boards would enhance the executive members’ knowledge of the threats and potential solutions. These advisory boards would be beneficial in steering policies and visions in the right direction and ensuring that the organization is making informed decisions based on the latest intelligence and best practices. Overall, the create section of the four actions framework highlights the importance of innovating and continuously seeking solutions to enhance the effectiveness of emergency management in the region.

The second bucket for creation—and improved collaboration—contains technological enhancements, which include asset management and COP software programs for up-to-the-minute information sharing, as discussed in previous chapters. Other advancements that would enhance disaster response and recovery include drone, virtual reality, and artificial intelligence technologies. This thesis suggests finding and implementing technological advancements in existing programs that educate both the public and first responder communities. The overall goal would be to identify areas where increased investment and innovation can lead to improved capabilities and more effective disaster response and recovery.

B. CONCLUSION

By using the blue ocean strategy, this thesis has made well-defined recommendations on best practices for enhancing the LAA UASI grant program. By creating a framework that emphasizes collaboration, new networks will be formed. These value-added collaborative frameworks will position the LA region for success in the complex homeland security arena. If implemented in some degree, these solutions would make the LAA UASI a model for effective program management. These solutions cannot eliminate personal conflicts among the people involved in these tasks, nor can they completely resolve the disagreements that arise in the competitive granting world. They

will, however, allow leaders to understand the potential end state of their tasks. The final chapter of this thesis offers recommendations for implementation—drawing on best practices and solid, well-defined, and achievable methods to move the grant world into a viable, sustainable, and collaborative framework.

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VI. RECOMMENDATIONS AND CONCLUSIONS

This thesis has examined the current state of the LAA UASI, including positive and negative aspects. The research has explored potential areas for improvement, and this chapter offers recommendations for future implementations to enhance the program's overall effectiveness and collaboration. The research presented in this thesis has aimed to contribute to the ongoing efforts to improve the safety and security of the LA community by providing valuable insights and recommendations. Overall, this thesis has provided a detailed examination of the current state of the LAA UASI and has identified key areas for improvement and growth.

A. GOVERNANCE RECOMMENDATIONS

Governance is at the heart of good public safety policy. The boots on the ground will strive to do the best they can, even in chaotic, challenging, and highly dynamic situations. The goal of governance is to give these members the best tools, training, and knowledge to achieve the end state of seamless operational capabilities. This section examines the LAA UASI's governance structure—with the aim of optimizing strategies. The recommendations that follow were created from best practices in governance, particularly those that apply to the unique structure and geography of the LA region. Notably, these recommendations do not involve the governance structure of individual cities, agencies, or authorities, under the assumption that such structures already work as designed. Table 4 outlines the issues that need correction and the projected end state for governance.

Table 4. Policy Recommendations Connected to LAA UASI Governance

Governance Category	Current Practices	End-State Recommendation
<i>Money distribution</i>	Percent based	Change to project based (could be loosely tied to percentages but should vary by the year and the needs of the region)
<i>Stakeholder buy-in</i>	Not considered	Consider stakeholder buy-in for monetary dispersal
<i>Mission-oriented decision-making strategies</i>	Somewhat applied, however loosely	Follow these justifications for all spending
<i>Competence board</i>	Current practice	Leave in place with oversight
<i>Oversight board(s)</i>	Only at the federal level	Implement oversight in the LAA UASI (emergency managers from the EMD should be responsible for oversight)
<i>Advisory council(s)</i>	Some for specialized operational capabilities, none at the authority level	Implement an advisory council for authority-level decision-makers

Each of the governance recommendations has implications for its implementation in the LAA UASI. The first row discusses the distribution of grant money. The research has shown there is much more transparency in project-based money awards than in percent-based allocations. Next, stakeholder buy-in is crucial for the approval authority. The thought is that if a city wants awarded money for a project, its counterparts should approve the idea. This theme correlates with the third row, which implies that mission-oriented decision-making strategies are often overlooked. This recommendation aligns spending or grant awards directly with the federal justifications required. While the list of stakeholders

is a long one, this thesis is concerned mainly with the fire department and emergency management assets:

- Cal OES—FEMA’s branch in California;
- The City of Los Angeles’s Mayor’s Office of Public Safety—the LA/LB UASI granting authority;
- All UASI participating cities—those contiguous with the City of Los Angeles—including Los Angeles County, Pasadena, Glendale, Burbank, South Pasadena, Alhambra, Monterey Park, Long Beach, Torrance, Culver City, Santa Monica, El Segundo, and Beverly Hills;
- Those who work in these cities with a need to know, including elected officials and their staff, fire chiefs and their management staff members, granting office staff, and EMD executives and staff members; and
- Members of the approval authority—police chief of the City of Los Angeles, fire chief of the City of Los Angeles; LAWA police chief, City of Los Angeles; port police chief, City of Los Angeles; police chief of the City of Long Beach; director of disaster preparedness and emergency communications, City of Long Beach; sheriff of the County of Los Angeles; fire chief of the County of Los Angeles; president of the LAAPCA; and president of the LAAFCA.¹⁴⁴

Besides seeking buy-in from stakeholders, the second component involves ensuring that the board adopts federal mission-focused agendas.

Regarding boards and councils, this thesis found that two important boards could be bolstered or strengthened. The current system of governance, as described in Chapter

¹⁴⁴ Llewellyn, *Fiscal Year 2019 Urban Area Security Initiative Grant Application*.

IV, is the competence board. While it may be a sound practice, there is little oversight or training of these board members, as discussed later in this chapter. However, an expanded oversight commission or board is a best practice. One recommendation is to create a unified oversight committee that brings together representatives from all three disciplines to oversee the distribution of UASI grant funds with a collective mission set of ideas. This committee could be responsible for setting clear, measurable goals and ensuring that they align with the needs of the area as well as the overall mission of the UASI program. Additionally, this committee could be responsible for monitoring the progress of these programs, as well as adjust them as needed. This type of oversight could be essential in ensuring that grant funds are used in the most effective and efficient way possible. Having additional oversight will increase transparency, decrease contention, and increase levels of trust in governance. The final row of recommendations shows that advisory councils should be strengthened. They should be independent and fair and available to all levels of the governance structure.

B. TECHNOLOGICAL RECOMMENDATIONS

For multiple agencies to play from the same sheet of music, they need to know what is available to them. Technology serves to fill this gap with the creation of asset management and COP software applications. Real-time data and analytics are essential in making quality decisions, both in preparing for emergencies—e.g., maintaining equipment, making purchasing decisions, and determining training needs—and managing operations during emergencies—e.g., resource ordering, tracking, and decision modeling. Table 5 outlines the issues that need correction and the projected end state for technology.

Table 5. Policy Recommendations Connected to LAA UASI Technology

Technology Category	Current Practices	End-State Recommendation
<i>Asset management software</i>	Multiple spreadsheets maintained by individual departments	Share a robust platform across all agencies
<i>COP software capabilities</i>	Individualized agencies have some of the software, and most EOCs have limited capabilities	Share a robust platform across all agencies
<i>Metric-driven decision-making strategies</i>	Limited	Enhance capabilities
<i>Real-time decision-making platforms</i>	Individualized by agency or EOC	Share among all agencies
<i>Resource status maintenance system</i>	Individualized by agency or EOC	Share among all agencies

Figure 5 introduces five commonsense technological applications from complex industries. The first two rows are described heavily in Chapter III. Regarding the impact of technological advances, the monetary savings will be well worth the upfront costs. Aside from cost savings, technology enables agency collaboration. Managers will cooperate effortlessly with their new COP software when the region has the next large-scale wildfire, flood, or earthquake. They can utilize their asset management program to see what other jurisdictions have available to share—and a true regional and cooperative approach to homeland security will take shape.

The available platforms from industry for both asset management and COP software are numerous. Research has shown, in alignment with FEMA’s recommendations, the capabilities of map-based systems with real-time data analytics. The next level is an artificial intelligence (AI) platform that assists in making predictive enhancements to emergency management. AI would also assist in geospatial mapping programs and enhance layering capabilities. Today’s environment of individualized command and dispatch centers do not have access to a regional program with these

capabilities, which this research has shown should be implemented. Agencies in the region currently share information only on a need-to-know basis. This thesis has demonstrated the need for a regional approach to sharing data, which will likely lead to collaborative networks of highly trained professionals.

One more consideration centers on who should pay for, input data in, and maintain the system. Research has described the past and present practices of UASI areas' using "investment justifications," mutually agreed upon monetary amounts carved out of overall area allotments. For the last five to six years, there have been four investment justifications. These included \$30–\$40 million "taken off the top" for the Los Angeles Regional Interagency Communications System.¹⁴⁵ There has also been a carve-out for intelligence communications at the Joint Regional Intelligence Center in Los Angeles.¹⁴⁶ This thesis asserts that the maintenance of UASI funding should be placed within emergency management departments of the City and County of Los Angeles. This redundancy will facilitate ownership and assist in regional training for the new systems.

C. TRAINING RECOMMENDATIONS

Training determines the readiness of emergency managers and first responders for incidents. This research, however, looked only at the training necessity for UASI managers and executive staff. The assumption was that individual agencies and area departments deliver operational training for their tactical purposes. The recommendations in Table 6 connect needed training with how it should be applied.

¹⁴⁵ "Board of Directors Meeting Minutes," Los Angeles Regional Interoperable Communications System Authority, July 7, 2022, https://la-rics.org/wp-content/uploads/2022-07-07-BOD-Regular_A_Minutes_APPROVED_08-04-22.pdf.

¹⁴⁶ Llewellyn, *Fiscal Year 2020 Urban Area Security Initiative Grant Award Acceptance*; "Home Page," Joint Regional Intelligence Center, accessed March 14, 2023, <https://www.jric.org/default.aspx?menuitemid=261&menugroup=Public+Home>.

Table 6. Policy Recommendations Connected to LAA UASI Training

Training Category	Current Practices	End-State Recommendation
<i>Leaders' intent clearly defined by the federal government</i>	Overarching advice given	Clearly delineate what falls into each category
<i>Mission orientation to FEMA/DHS and homeland security priorities</i>	Given in the Notice of Funding Opportunity	Increase clarity for executive-authority members, and maintain continually
<i>Knowledge of process and among UASI board members</i>	Happens if members stay in their positions, yet today's political climate often leads to rapid turnover of executive staff	Continually train all executive members on UASI policies

Table 6 describes three main training needs for LAA UASI executive-level decision-makers. This thesis finds that training would further bolster a collaborative spirit. First, as executive members of the authority become trained in their UASI mission, they can inject their newfound knowledge into their home agencies. When managers understand the specific reasons for the grant, they will not abuse their award money or place it in the general fund for use by other needed expenses. Executives are mission oriented, but they sometimes have competing missions that impede the mutual mission of homeland security.

The bulk of this training is required to clearly define the leaders' intent from a federal perspective. For that reason, these training platforms should be created by FEMA. Additionally, the training needs to be ongoing. As the approval authority's and working group's members rotate out, this thesis recommends an ongoing approach to building on the teamwork and fostering networks of cooperation.

D. FUTURE RESEARCH AND CONSIDERATIONS

The research in this thesis has provided collaborative solutions specifically for the LA region. Some lingering thoughts could be opportunities for future research. First, how could using these solutions fit within other UASI regions? I believe that by taking some of the large ideas within governance, technology, and training, most if not all areas could stand to benefit from the collaboration created with these solutions. Nonetheless, threat considerations, including personnel challenges and political climate, must first be addressed.

Another area of discussion centers on the actual implementation of these ideas. The first question I envision coming from the technology discussion is who would be in charge of maintaining the software programs. After careful thought and deep discussion with respected colleagues, I conclude that the best equipped and most impartial group is the emergency management sector. This research process has instilled in me a deep respect for the emergency management departments of the LA region, which I believe are an untapped resource. Law enforcement and fire department response missions cannot be overshadowed, but the coordination provided by the emergency management arena often goes underutilized. Therefore, future research should consider best practices for developing these EMD networks, including funding allocations for their increasing areas of responsibilities.¹⁴⁷

Further research should also be undertaken for policy implementation, especially related to the training program. Regarding the comment about political climate, ideologies shift depending on the administration. One significant ideology pervasive in policing is the “defund” movement. It is plausible to imagine UASI board members looking to their constituents to lessen funding to a program that could be perceived as increasing threats to the public. Another challenge comes in the form of “individual liberties” coalitions that propose to limit the government’s intelligence collection and “data mining.” They often

¹⁴⁷ Federal Emergency Management Agency, *A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action*, FDOC 104-008-1 (Washington, DC: Federal Emergency Management Agency, 2011), https://www.fema.gov/sites/default/files/2020-07/whole_community_dec2011__2.pdf.

believe that fusion centers inhibit individual liberties and monitor First Amendment activism.¹⁴⁸ Both of these ideologies could pose a risk to UASI funding in the future.

A final consideration for future research lies in creating a framework to evaluate grant effectiveness. Often, in work groups, funding is determined through the use of “legacy programs,” or projects that have been funded throughout the duration of the grant. While some might assume that these legacy programs are working, future research should consider which metrics are used to deem these programs beneficial. Indeed, grant funding programs must do a better job at assessing their impacts, both positive and negative. When these so-called legacy programs are scrutinized, better ways may be revealed to achieve the desired ends. Future research should develop concrete methods for this type of unbiased analysis and specific processes whereby programs could be measured.

E. CONCLUSION

This thesis has explored potential strategies to unify and coordinate the complex structure of the LAA UASI. At the heart are public servants who want to provide the highest level of public safety to the people and communities they serve. The enemy of these hard-working professionals is often an internal saboteur who attempts to sow disruption, chaos, and confusion from within the UASI framework. To avoid these internal divisions, it is important to look at collaborative solutions that enhance cohesion, sharing, and interagency partnerships.

Through the careful use of the blue ocean strategy’s four actions framework, this thesis has created a new value curve for the LAA UASI. Using the four actions framework, the LAA UASI has some definite challenges it must address. The framework provides a structure for creating new market spaces and value for customers. In the context of the LAA UASI, this framework has been used to identify opportunities for improving homeland security across the entire region. The specific solutions encompass developing

¹⁴⁸ Chip Gibbons, *Still Spying on Dissent: The Enduring Problem of FBI First Amendment Abuse* (Washington, DC: Defending Rights & Dissent, 2019), <https://rightsanddissent.org/wp-content/uploads/2020/03/Still-Spying-on-Dissent.pdf>.

enhancements to UASI governance, adopting technological innovations, and addressing the identified training gaps.

While this thesis did not specifically address the implementation of these solutions, it assessed that all the solutions have viable applications with minimal disruption. Sharing information is ultimately what a regional approach to homeland security demands of its players. As this thesis takes many of the failures described in after-action reports from 9/11 and Hurricane Katrina, it is important to create a COP by increasing situational awareness, provoking interoperable communications platforms, and developing shared training networks.

The LAA UASI has been actively working toward enhancing public safety in the region for well over 20 years, and this thesis has drawn on many of the lessons and experiences of the dedicated professionals who have worked tirelessly for decades. The mission of this thesis is to unite the LAA UASI by building collaborative solutions that will bring public safety into the next 20 years.

LIST OF REFERENCES

- ABC News. "Al Qaeda Tried to Outsource L.A. Skyscraper Terror Plot." February 9, 2006. <https://abcnews.go.com/WNT/story?id=1600806&page=1#:~:text=%22Khalid%20Sheikh%20Mohammed%2C%20the%20mastermind,West%20Coast%2C%22%20Bush%20said>.
- Ansell, Chris, and Alison Gash. "Collaborative Governance in Theory and Practice." *Journal of Public Administration Research and Theory* 18, no. 4 (October 2008): 543–71. <https://doi.org/10.1093/jopart/mum032>.
- Bahlis, Jay, and Stephen Tourville. "Where Training Resources Should Be Allocated." Paper presented at the Interservice/Industry Training, Simulation, and Education Conference, 2005. Wiley Online.
- Balfour, Robert E. "Next Generation Emergency Management Common Operating Picture Software/Systems (COPSS)." In *Proceedings of the 2012 IEEE Long Island Systems, Applications and Technology Conference*, 1–6. Piscataway, NJ: IEEE, 2012. <https://doi.org/10.1109/LISAT.2012.6223101>.
- Baret, Scott, Nicole Sandford, Edward Hida, Jyoti Vazirani, and Steven Hatfield. *Developing an Effective Governance Operating Model: A Guide for Financial Services Boards and Management Teams*. London: Deloitte, 2013. <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Financial-Services/dttl-fsi-US-FSI-Developinganeffectivegovernance-031913.pdf>.
- Barlow, Jeremy. "Board Governance Models: A Comprehensive List." Board Effect, April 19, 2016. <https://www.boardeffect.com/blog/board-governance-models-a-comprehensive-list/>.
- Bush, George. *Securing the Homeland, Strengthening the Nation*. Washington, DC: White House, 2002. https://www.dhs.gov/sites/default/files/publications/homeland_security_book.pdf.
- Cabrey, Tricia, Amy Haughey, and Terry Cooke-Davies. *Enabling Organizational Change Management Strategic Initiatives*. Newtown Square, PA: Project Management Institute, 2014. <https://training.procept.com/library/pmi-changemgmt-en.pdf>.
- California Earthquake Authority (blog). "How to Make an Earthquake Emergency Kit." October 30, 2019. <https://www.earthquakeauthority.com/Blog/2019/How-to-Make-an-Earthquake-Emergency-Kit>.

- California FIREScope. *Standardized Hazardous Materials Equipment List*. ICS-1120. Riverside: California FIREScope, 2016. <https://firescope.caloes.ca.gov/ICS%20Documents/ICS-1120.pdf>.
- California Independent System Operator. "Understanding the ISO." Accessed December 5, 2022. <https://www.caiso.com/about/Pages/OurBusiness/Default.aspx>.
- Chanpen, Rittinan, Kobkiat Saraubon, and Panurut Chinakul. "Asset Management System Using NFC and IoT Technologies." In *Proceedings of the 2019 3rd International Conference on Software and e-Business*, 124–28. New York: Association for Computing Machinery, 2019. <https://doi.org/10.1145/3374549.3374558>.
- Coburn, Tom. *Safety at Any Price: Assessing the Impact of Homeland Security Spending in U.S. Cities*. Self-published, 2012. <https://info.publicintelligence.net/SenatorCoburn-UASI.pdf>.
- Cornwall, Deborah, and Mary K. Totten. *Competency-Based Governance Enters the Health Care Boardroom*. Chicago: American Hospital Association's Care for Healthcare Governance, 2010. <https://trustees.aha.org/sites/default/files/trustees/10-competency-based-governance.pdf>.
- CountyOffice.org. "Police Departments in Los Angeles County, California." Accessed September 24, 2022. <https://www.countyoffice.org/ca-los-angeles-county-police-department/>.
- Cristea, Mihai-Alexandru. "How to Streamline Electric Utility Asset Management." *Business Review* (Romania), April 28, 2022. <https://business-review.eu/energy/how-to-streamline-electric-utility-asset-management-230328>.
- Currie, Chris P. *Homeland Security Grant Program: Additional Actions Could Further Enhance FEMA's Risk-Based Grant Assessment Model*. GAO-18-354. Washington, DC: Government Accountability Office, 2018.
- Dallas Urban Area Security Initiative Working Group. *Dallas/Fort Worth/Arlington Urban Area Strategy*. Arlington: North Central Texas Council of Governments, 2011.
- Danielsson, Erna, Aida Alvinus, and Gerry Larsson. "From Common Operating Picture to Situational Awareness." *International Journal of Emergency Management* 10, no. 1 (2014): 28–47. <https://doi.org/10.1504/IJEM.2014.061659>.
- Department of Homeland Security. *Critical Infrastructure Threat Information Sharing Framework: A Reference Guide for the Critical Infrastructure Community*. Washington, DC: Department of Homeland Security, 2016. <https://www.cisa.gov/sites/default/files/publications/ci-threat-information-sharing-framework-508.pdf>.

- . “DHS Announces Funding Opportunity for Fiscal Year 2020 Preparedness Grants.” February 14, 2020. <https://www.dhs.gov/news/2020/02/14/dhs-announces-funding-opportunity-fiscal-year-2020-preparedness-grants>.
- . *National Infrastructure Protection Plan: Partnering to Enhance Protection and Resiliency*. Washington, DC: Department of Homeland Security, 2009. <https://www.cisa.gov/sites/default/files/publications/national-infrastructure-protection-plan-2009-508.pdf>.
- . *National Preparedness Goal*. Washington, DC: Department of Homeland Security, 2011. <https://www.fema.gov/pdf/prepared/npg.pdf>.
- . *National Preparedness Guidelines*. Washington, DC: Department of Homeland Security, 2007. https://www.fema.gov/pdf/emergency/nrf/National_Preparedness_Guidelines.pdf.
- Department of Homeland Security, System Assessment and Validation for Emergency Responders Program. “Common Operating Picture for Emergency Responders.” September 2008. https://www.dhs.gov/sites/default/files/publications/Common_OpER_HLT_0908-508.pdf.
- Epstein, Gerald. *The Asset Management Industry in the United States*. Financing for Development Series 271. Santiago: United Nations Economic Commission for Latin America and the Caribbean, 2019. https://repositorio.cepal.org/bitstream/handle/11362/45045/1/S1900994_en.pdf.
- Errett, Nicole A., Calvin Bowman, Daniel J. Barnett, Beth A. Resnick, Shannon Frattaroli, and Lainie Rutkow. “Regional Collaboration among Urban Area Security Initiative Regions: Results of the Johns Hopkins Urban Area Survey.” *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 12, no. 6 (December 2014): 356–65. <https://doi.org/10.1089/bsp.2014.0057>.
- Esri. “Common Operating Picture for Oil and Gas.” September 26, 2017. Video, 28:07. https://mediaspace.esri.com/media/t/1_mcgkk5ji.
- Federal Aviation Administration. “Part 139 Airport Certification Status List (ACSL).” February 23, 2023. https://www.faa.gov/airports/airport_safety/part139_cert/part_139_airport_certification_status_list.
- Federal Emergency Management Agency. “The Department of Homeland Security (DHS) Notice of Funding Opportunity (NOFO) Fiscal Year 2023 Homeland Security Grant Program.” February 27, 2023. <https://www.fema.gov/grants/preparedness/homeland-security/fy-23-nofo>.
- . *Fiscal Year 2022 Preparedness Grants Manual*. FEMA Manual 207–22-0001. Washington, DC: Federal Emergency Management Agency, 2022.

- . “Glossary of Terms.” In *Guide for All-Hazard Emergency Operations Planning*, SLG 101, GLO-2–10. Washington, DC: Federal Emergency Management Agency, 1996. <https://www.fema.gov/pdf/plan/slg101.pdf>.
- . *Hurricane Sandy FEMA After-Action Report*. Washington, DC: Federal Emergency Management Agency, 2013. <https://www.alnap.org/system/files/content/resource/files/main/sandy-fema-aar.pdf>.
- . *National Incident Management System*. 3rd ed. Washington, DC: Federal Emergency Management Agency, 2017. https://www.fema.gov/sites/default/files/2020-07/fema_nims_doctrine-2017.pdf.
- . *A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action*. FDOC 104–008-1. Washington, DC: Federal Emergency Management Agency, 2011. https://www.fema.gov/sites/default/files/2020-07/whole_community_dec2011__2.pdf.
- Fenster, Mark. *The Transparency Fix: Secrets, Leaks, and Uncontrollable Government Information*. Stanford: Stanford University Press, 2017.
- Fukuyama, Francis. “What Is Governance?” Working Paper 314. Washington, DC: Center for Global Development, 2013.
- Garcetti, Eric. “Fiscal Year 2018 State Homeland Security Grant Acceptance.” Official memorandum. Los Angeles: City of Los Angeles, 2019. http://clkrep.lacity.org/onlinedocs/2019/19-0051_rpt_MAYOR_01-16-2019.pdf.
- Gerlich, Stacy E. “How LAFD CERT May Be Understood as a Smart Practice: How It Is Pioneering a Transition to Whole Community CERT and How It Can Serve as the Template for CERT Programs Nationally.” Master’s thesis, Naval Postgraduate School, 2014. <https://calhoun.nps.edu/handle/10945/42633>.
- Gibbons, Chip. *Still Spying on Dissent: The Enduring Problem of FBI First Amendment Abuse*. Washington, DC: Defending Rights & Dissent, 2019. <https://rightsanddissent.org/wp-content/uploads/2020/03/Still-Spying-on-Dissent.pdf>.
- Granda, Carlos. “Terror Group’s Photo of LA Building Raising Security Concerns.” ABC News San Francisco, February 17, 2019. Video, 1:40. <https://abc7news.com/aon-tower-threat-isis-los-angeles-terrorist-video/5142806/>.
- Hamm, Mark S. “Prisoner Radicalization: Assessing the Threat in U.S. Correctional Institutions.” *National Institute of Justice Journal*, no. 261 (2008): 14–19. <https://www.ojp.gov/pdffiles1/nij/224083.pdf>.
- Hamm, Mark S., and Cécile Van de Voorde. “Crimes Committed by Terrorist Groups: Theory, Research, and Prevention.” *Trends in Organized Crime* 9, no. 2 (December 2005): 18–50. <https://doi.org/10.1007/s12117-005-1023-y>.

- Hastings, Nicholas Anthony John. *Physical Asset Management with an Introduction to ISO55000*. 2nd ed. Cham, Switzerland: Springer, 2015. <https://doi.org/10.1007/978-3-319-14777-2>.
- Hill, Carolyn J., and Laurence E. Lynn. "Governance and Public Management, an Introduction." *Journal of Policy Analysis and Management* 23, no. 1 (Winter 2004): 3–11. <https://www.jstor.org/stable/3326187>.
- Homeland Security Council. *National Strategy for Homeland Security*. Washington, DC: Homeland Security Council, 2007. https://www.dhs.gov/xlibrary/assets/nat_strat_homelandsecurity_2007.pdf.
- Homeland Security Grants. "Urban Areas Security Initiative (UASI) Program." Accessed June 24, 2022. <https://www.homelandsecuritygrants.info/GrantDetails.aspx?gid=17162>.
- Jakes, Pamela J., Christine Esposito, Sam Burns, Antony S. Cheng, Kristen C. Nelson, Victoria E. Sturtevant, and Daniel R. Williams. *Best Management Practices for Creating a Community Wildfire Protection Plan*. General Technical Report NRS-89. Newtown Square, PA: U.S. Forest Service, Northern Research Station, 2012. <https://doi.org/10.2737/NRS-GTR-89>.
- Jenkins, William O., Jr. *Actions Taken to Implement the Post-Katrina Emergency Management Reform Act of 2006*. GAO-09-59R. Washington, DC: Government Accountability Office, 2008. <https://www.gao.gov/assets/gao-09-59r.pdf>.
- . *DHS Risk-Based Grant Methodology Is Reasonable, but Current Version's Measure of Vulnerability Is Limited*. GAO-08-852. Washington, DC: Government Accountability Office, 2008. <https://www.gao.gov/assets/gao-08-852.pdf>.
- . *Urban Area Security Initiative: FEMA Lacks Measures to Assess How Regional Collaboration Efforts Build Preparedness Capabilities*. GAO-09-651. Washington, DC: Government Accountability Office, 2009. <https://www.gao.gov/assets/gao-09-651.pdf>.
- Joint Regional Intelligence Center. "Home Page." Accessed March 14, 2023. <https://www.jric.org/default.aspx?menuitemid=261&menugroup=Public+Home>.
- Kim, W. Chan, and Renée Mauborgne. *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*. Cambridge, MA: Harvard Business School Press, 2005.
- Kleinhenz, Robert, Ferdinando Guerra, Christine Cooper, and Myasnik Poghosyan. *The Entertainment Industry and the Los Angeles County Economy*. Los Angeles: Los Angeles County Economic Development Corporation, 2012. <https://laedc.org/wp-content/uploads/2012/08/EntertainmentinLA.pdf>.

- Labib, Ashraf. "Computerised Maintenance Management Systems." In *Complex System Maintenance Handbook*, 417–35. Springer Series in Reliability Engineering. London: Springer, 2008. https://doi.org/10.1007/978-1-84800-011-7_17.
- Llewellyn, Richard. *Fiscal Year 2019 Urban Area Security Initiative Grant Application*. Los Angeles: Office of the City Administrative Officer, 2019. https://clkrep.lacity.org/online/docs/2019/19-0695_rpt_CAO_09-26-2019.pdf.
- . *Fiscal Year 2020 Urban Area Security Initiative Grant Award Acceptance*. Los Angeles: Office of the City Administrative Officer, 2021. https://clkrep.lacity.org/online/docs/2020/20-1156_rpt_cao_03-19-21.pdf.
- Los Angeles Regional Interoperable Communications System Authority. "Board of Directors Meeting Minutes." July 7, 2022. https://la-rics.org/wp-content/uploads/2022-07-07-BOD-Regular_A_Minutes_APPROVED_08-04-22.pdf.
- MacManus, Susan A., and Kiki Caruson. "Emergency Management: Gauging the Extensiveness and Quality of Public-and Private-Sector Collaboration at the Local Level." *Urban Affairs Review* 47, no. 2 (March 2011): 280–99. <https://doi.org/10.1177/1078087410362050>.
- Macnamara, Doug. "Models of Corporate/Board Governance." *Leadership Acumen*, no. 21 (April/May 2005): 1–10. <http://www.banffexeclead.com/Newsletter04/PDF/Leadership%20Acumen%2021%20V2%20Models%20of%20Corporate%20and%20Board%20Governance.pdf>.
- Masadeh, Mousa. "Training, Education, Development and Learning: What Is the Difference?" *European Scientific Journal* 8, no. 10 (May 2012): 62–68. <https://doi.org/10.19044/esj.2012.v8n10p%p>.
- Masse, Todd, Siobhan O'Neil, and John Rollins. *The Department of Homeland Security's Risk Assessment Methodology: Evolution, Issues, and Options for Congress*. CRS Report No. RL33858. Washington, DC: Congressional Research Service, 2007. <https://sgp.fas.org/crs/homsec/RL33858.pdf>.
- Michalski, Wolfgang, Riel Miller, and Barrie Stevens. "Governance in the 21st Century: Power in the Global Knowledge Economy and Society." In *Governance in the 21st Century*, 7–26. Paris: Organisation for Economic Co-operation and Development, 2000.
- Milhem, Wajdi, Khalil Abushamsieh, and Maria Nieves Pérez Aróstegui. "Training Strategies, Theories and Types." *Journal of Accounting—Business & Management* 21, no. 1 (2014): 12–26. https://www.researchgate.net/profile/Khalil-Abushamsieh/publication/269165999_Training_strategies_theories_and_types/links/549dce06cf2fedbc311998f/Training-strategies-theories-and-types.pdf.

- Nash, Rebecca M. “Predicting the Impacts of Urban Area Security Initiative Funding on Terrorist Incidents in the United States.” *Criminology, Criminal Justice, Law & Society* 18, no. 2 (January 2017): 1–10. <https://ccjls.scholasticahq.com/api/v1/articles/1989-predicting-the-impact-of-urban-area-security-initiative-funding-on-terrorist-incidents-in-the-united-states.pdf>.
- National Commission on Terrorist Attacks upon the United States. *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks upon the United States*. Washington, DC: Government Printing Office, 2004. <https://www.govinfo.gov/content/pkg/GPO-911REPORT/pdf/GPO-911REPORT.pdf>.
- National Economic Council Briefing Room (blog). “A Record Year for America’s Ports and a Look to the Year Ahead.” January 20, 2022. <https://www.whitehouse.gov/nec/briefing-room/2022/01/20/a-record-year-for-americas-ports-and-a-look-to-the-year-ahead/>.
- Norquist, Bruce R. “Common Operating Picture and Planning Environment for Disaster Response.” Paper presented at the 13th International Command and Control Research and Technology Symposia, Seattle, WA, June 2008. <https://apps.dtic.mil/sti/citations/ADA486784>.
- OECD Development Centre. *Business Insights on Emerging Markets 2021*. Paris: OECD Development Centre, 2021. <https://www.oecd.org/dev/Business-Insights-Emerging-Markets-2021.pdf>.
- Office of Management and Budget. “Stopping Wasteful and Unnecessary Spending.” In *A Budget for America’s Future: Budget of the U.S. Government*, 13–17. Washington, DC: Office of Management and Budget, May 2020. <https://www.govinfo.gov/content/pkg/BUDGET-2021-BUD/pdf/BUDGET-2021-BUD.pdf>.
- Painter, William L. *Issues in Homeland Security Policy for the 112th Congress*. CRS Report No. R42025. Washington, DC: Congressional Research Service, 2011.
- Peterson, Raymond H. *Accounting for Fixed Assets*. 2nd ed. New York: Wiley, 2002.
- Pinkowski, Jack, ed. *Homeland Security Handbook*. Public Administration and Public Policy/139. Boca Raton: CRC Press, 2008.
- Rehman, Faizan Ur, Imad Afyouni, Ahmed Lbath, and Saleh Basalamah. “Towards Building Smart Maps from Heterogeneous Data Sources.” In *Proceedings of the Ninth International Conference on Advanced Geographic Information Systems, Applications, and Services*, edited by ClausPeter Rückemann, Yerach Doytscher, Jianhong Cecilia Xia, and Fernando José Braz, 9–14. International Academy, Research, and Industry Association, 2017. https://www.researchgate.net/publication/316922290_Towards_Building_Smart_Maps_from_Heterogeneous_Data_Sources.

- Ridge, Tom. "Remarks at the Urban Area Security Initiative Conference." Urban Area Security Initiative Conference, Milwaukee, WI, September 13, 2004.
- Riggio, Ronald, and Rebecca J. Reichard. "The Emotional and Social Intelligences of Effective Leadership: An Emotional and Social Skill Approach." *Journal of Managerial Psychology* 23, no. 2 (February 2008): 169–85. <https://doi.org/10.1108/02683940810850808>.
- Rodriguez, Jacqueline. *City of Los Angeles: Opportunity Zone Prospectus*. Los Angeles: Los Angeles Economic and Workforce Development Department, 2019. https://ewddlacity.com/images/opportunityzones/LA-Opportunity-Zone-Prospectus_2019.pdf.
- Roelofs, Portia. "Transparency and Mistrust: Who or What Should Be Made Transparent?" *Governance* 32, no. 3 (2019): 565–80. <https://doi.org/10.1111/gove.12402>.
- Sabatier, Paul, and Hank C. Jenkins-Smith. "Evaluating the Advocacy Coalition Framework." *Journal of Public Policy* 14, no. 2 (1994): 175–203. <https://doi.org/10.1017/S0143814X00007431>.
- Saito, Yoshihiro. "Is Good Governance a Necessary Precursor to Peace?" *United Nations Development Programme* (blog), January 15, 2021. <https://www.undp.org/blog/good-governance-necessary-precursor-peace>.
- Thomas, Laura. "In Praise of Reinventing the Wheel." *Phi Delta Kappan* (April 2008): 612–13. <https://www.antioch.edu/wp-content/uploads/2017/01/wheel.pdf>.
- Thomas, Pierre, and Richard Esposito. "Osama Bin Laden Raid: Al Qaeda 'Playbook' Revealed." ABC News, May 6, 2011. <https://abcnews.go.com/Blotter/osama-bin-laden-raid-al-qaeda-playbook-revealed/story?id=13544154>.
- Thornberg, Christopher, Robert Kleinhenz, and Brian Vernderplas. *City of Los Angeles: A Comparative Analysis*. Los Angeles: Beacon Economics, 2019. <https://cao.lacity.org/debt/2019.06.13%20-%20City%20of%20Los%20Angeles%20Comparative%20Analysis.pdf>.
- Trautman, Tracey, John Carnegis, Jennifer Christie, Kyle Evans, and Katie Hiles. "Providing Program Management Support in Your State." Presentation at the SLGCP Regional Conference, August 16–17, 2005. <https://www.hsd1.org/c/view?docid=775263>.
- Trinidad, Elson. "Is L.A. a West Coast City? For Many, It's the East. Or the North." KCET, November 21, 2017. <https://www.kcet.org/shows/lost-la/is-l-a-a-west-coast-city-for-many-its-the-east-or-the-north>.

- United Nations Global Compact. “Governance.” Accessed August 21, 2022.
<https://unglobalcompact.org/what-is-gc/our-work/governance>.
- U.S. Congress. Senate Select Committee on Intelligence. *Report of the Senate Select Committee on Intelligence, Committee Study of the Central Intelligence Agency’s Detention and Interrogation Program*. S. Report No. 113–288. Washington, DC: U.S. Senate, 2014. <https://www.intelligence.senate.gov/sites/default/files/publications/CRPT-113srpt288.pdf>.
- Williams, Pamela S. “Fiscal Year 2022 Notices of Funding Opportunity.” Grant Programs Directorate Information Bulletin No. 474. Official memorandum. Washington, DC: Department of Homeland Security, 2022. https://www.fema.gov/sites/default/files/documents/fema_ib-fy-2022-preparedness-grants.pdf.
- Wise, Charles R., and Rania Nader. “Organizing the Federal System for Homeland Security: Problems, Issues, and Dilemmas.” *Public Administration Review* 62, no. S1 (September 2002): 44–57. <https://doi.org/10.1111/1540-6210.62.s1.8>.

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